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ABSTRACT

The project described in this publication took place during the 1974-75 school year in an elementary school (K-4) in Berkeley, California. The purpose of the project was to integrate the school yard into the daily classroom activities of the children and the staff. Included in the publication are: (1) a description of the environmental yard, (2) the teaching and learning activities used, (3) the research component of the project, (4) methods used to develop the project, and (5) appendices of a number of items including questionnaires, activity cards, maps, and brainstorming sessions. The project staff felt the real success of the project was in clarifying how to do what they were trying to do, methods that need to be employed, and how to plan to orchestrate the program. Recommendations for future program development are presented. (RH)

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December 1976

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BERKELEY UNIFIED SCHOOL DISTRICT

Washington Environmental Yard:

An Environmental Education Tool

Description and Assessment

Final Report to

The Department of Health, Education and Welfare
Office of Education - Office of Environmental Education
Washington, D.C.

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Grant # GOO-75-00911

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TABLE OF CONTENTS

	Page
Part One: Introduction and Basic Orientation	1
Introduction	1
Washington Environmental Yard: A description	3
The Project Staff and Organization	7
The Target Groups	9
The Project Goals	9
Summary of Project Goals	10
Part Two: Staff Initiated Integrative Activities	11
Chronology of Student-Aimed PEET and Staff Activities: Monthly Summary	11
Chronology of Staff Aimed PEET Activities	15
Chronolo_y of Community Aimed PEET Activities	17
Part Three: The Purposes of Project WEY Demonstrated	20
Students Involvement Documentation	20
Student Log	20
Student Maps	21
Student Questionnaire	27
Environmental Alphabet	31
Taped Interviews	35
Fourth Grade Maps	36
Summary	56
Staff-Involvement/Participation Documentation	39
Staff Log	39
Staff Questionnaire	42
Parent-Involvement/Participation Documentation	48
Parent Questionnaire	48
Conclusion	56
Part Four: The Methods Integral to the Purposes of Project WEY	61
Summary of Research Methods	61
Levels of Methodological Focus	61
Future Operational Method: A Proposal	63
Operational Lessons Learned During the Pilot Program	64
Detailed Proposed Operational Procedure	65
Appendices	69-243

LIST OF ILLUSTRATIONS AND PLATES

Page

Washington Environmental Yard--as it existed in 1971-------- 2

Washington Environmental Yard in 1976--from the school roof- 4

Figure 1 - Map of Washington Environmental Yard------------ 5

Figure 2 - Plot of Significant Curricular Events 1975-76----16

Dr. Wong and PEET members working with teaching staff-------19

Figure 3 - Plot of Elements shown in children's drawings of the Yard - indicating relative user preference--------22

Sample Student Drawings of the Yard----------23-26

Students Working in the Garden Monitoring Growth, 1976------38

Figure 4 - Places Teachers Used Most 1975-76----------41

Spring Yard Fest, 1976, from Grove Street----------47

Washington Environmental Yard, 1976 - the Creek and Natural Resource Area, with the school in the background-55

WASHINGTON ENVIRONMENTAL YARD: AN ENVIRONMENTAL EDUCATION TOOL

Part One: Introduction and Basic Orientation

Introduction

The Project in Environmental Education described in these pages took place during the 1974-75 academic year at Washington Elementary School, a K-4 school with about 480 students, in Berkeley, California. The purpose of the project was in part to integrate the school's reconstructed playground into the daily classroom activities of the school children and staff. In order to understand the full significance of that goal, one must first understand the radically different nature of the playground itself. The playground and the "idea" of Washington Environmental Yard (WEY) are thus described and defined on the following pages.

Following the description of the yard, the project staff is described, and then three broad goals are defined. These goals then form the three subsequent basic parts of the paper's outline:

1) the teaching and learning activities undertaken, in chronological order,
2) the research component of the project, focusing on results demonstrating environmental education (E.E.) as it is defined at WEY as crucial to the survival of E.E. as a concept, and
3) the methods used throughout the year integral to the purposes of project WEY, and on a proposed set of methods for any program that might develop out of this project.

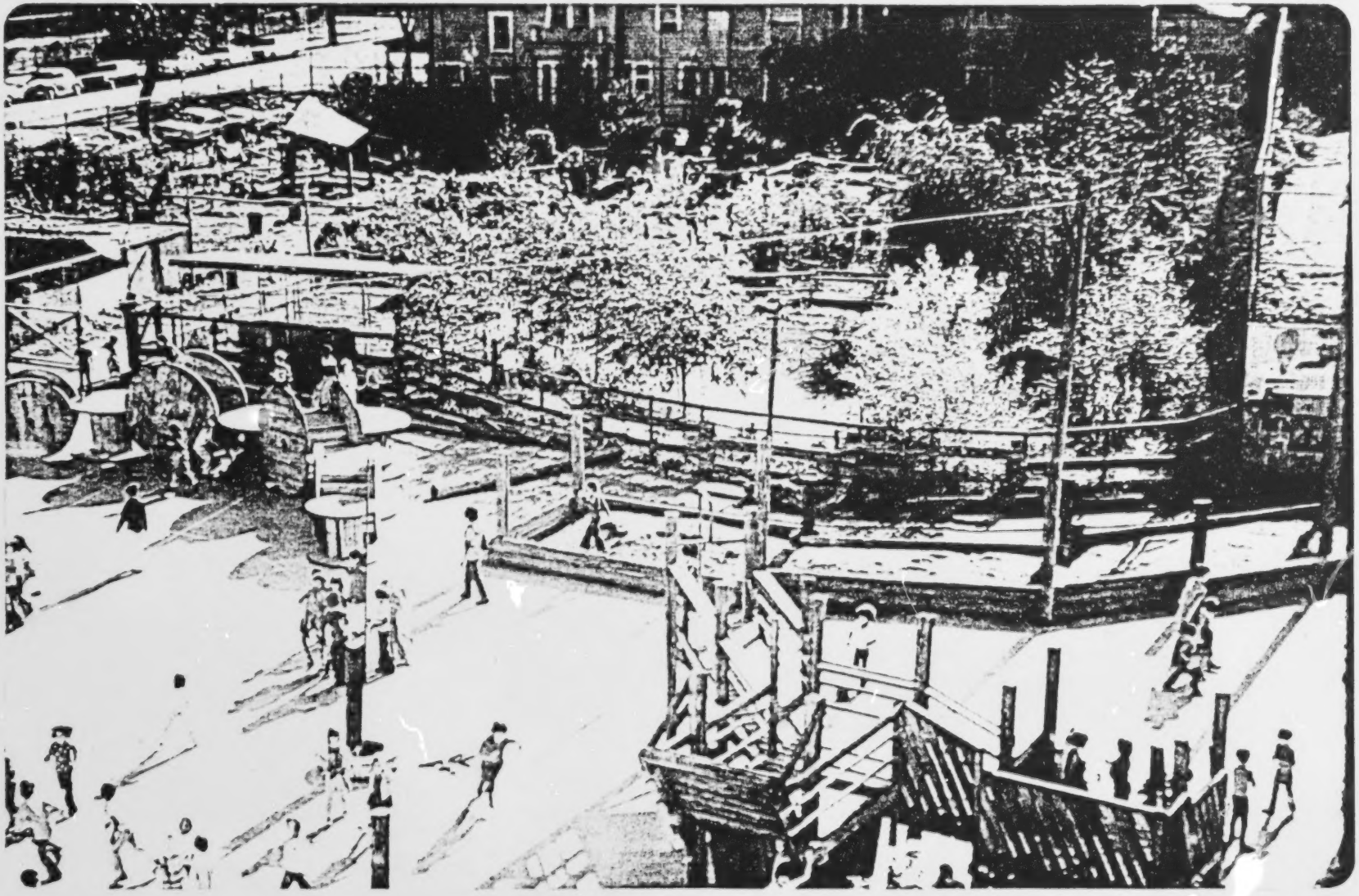
WASHINGTON ENVIRONMENTAL YARD -- AS IT EXISTED IN 1971

It must be said at the outset that the project described in these pages is not finished, even though its funding has terminated. Although the Project in Environmental Education Team (PEET) sees the project as a pilot only, we have made tremendous progress, we feel, toward establishing a model E.E. program and broadly applicable procedures for doing likewise elsewhere.

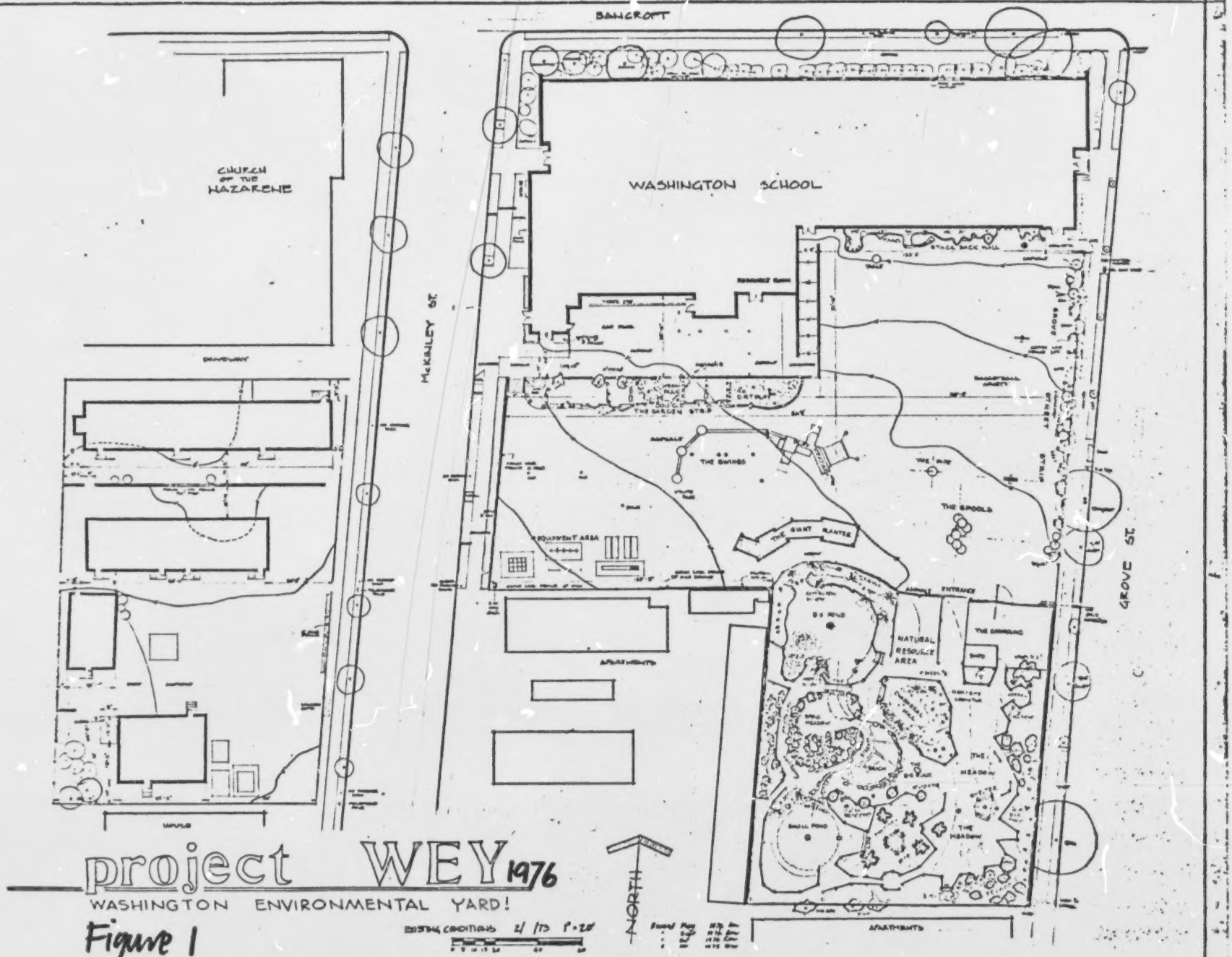
Washington Environmental Yard: A Description

Washington Environmental Yard is situated at Washington Elementary/University of California Laboratory School in central Berkeley. The overall reconstruction process has been underway since 1971, involving the co-creative efforts of all groups within the surrounding community: children, teachers, parents, school administrators, neighboring residents, university students, public and private institutions, plus visiting groups from communities beyond Berkeley and California. A wide-ranging cast continues to participate in the activities of a dramatic visual and behavioral change on the site.

In one third of the yard 20,000 square feet of asphalt has been replaced by a Natural Resource Area containing 2700 square feet of water surface and 17,000 square feet of vegetation covered earth. The water area, or aquatic system, consists of two ponds connected by a bridge-covered stream, a beach, and associated plant life. Within the lower, larger pond are numerous insects and mosquito fish. An inventory of birds visiting the Yard showed that at least twenty-eight species visit the Yard, ranging in size from gulls to hummingbirds. An inventory of the plant-life on the



WASHINGTON ENVIRONMENTAL YARD IN 1976 -- from the school roof.



project WEY 1976

WASHINGTON ENVIRONMENTAL YARD!

Figure 1

entire yard (55,000 square feet) showed the presence of about 120 species of trees, shrubs, grasses, annual flowers and vegetables. Within the Natural Resource Area redwood, chaparral, meadow, pine and softwood forest ecosystems are represented. Naturally the presence of so much water, soil and vegetation attracts numerous insects.

Around the periphery of the remaining two-thirds of the yard, a colorful assortment of vegetable and flower garden plots, sculpted planters, shade trees, vines and flowering shurbs are colonizing the previously stark chainlink fences. Within this area is about 32,000 square feet of asphalt, dominated by a large, integrated timber play structure with a slide, a pole-slide, a net and balance beams (the swings were not yet completed). A ten-foot high painted mural provides colorful expression to the spirit of the place, together with vivid, gently waiving banners hanging from the school building and a giant directional compass painted on the ground. The three other major elements in this area are a section of water pipe, a spool structure, and an area of traditional gymnastic equipment.

Project Staff and Organization

PEET's internal organization was left as loose as possible so that specific unforeseen problems or opportunities would not be passed by because no one was "slotted" to handle that contingency. Areas of expertise ranged from landscape design to elementary education and from environmental interests based primarily on the arts to those steeped in science. However, each individual member of PEET was very knowledgeable in more than one area so that responsibilities could be shared broadly.

Within this context of sharing and cross-fertilization, each member of the group participated in a sub-group which dealt with a particular kind of issue. Tom Armour, Jerry Belaire, Jeff Dwelle and Ellen Skotheim focused on creating, directing and analyzing the outdoor E.E. activities of the students, experimenting with various

activities, documenting them, and communicating results to the second sub-group. This activity often necessarily involved them in indoor, classroom work as well, and in direct interaction with classroom teachers. The activities they found to work well and the tools necessary to doing them are listed in appendix B.

A second group of classroom teachers focused on teacher-training, formalizing activities into curricula, and doing from an indoor perspective the kinds of things the other group did from an outdoor perspective. This group consisted of Tom Armour and three classroom teachers, Mel Cox, Pearlene Shannon and Angela Wong. (Appendix C contains a sampling of the E.E. "Seed Cards" they developed and an explanation of how they were compiled.)

The external community of parents and city authorities was focused on by Mary Jefferds, Robin Moore and Herbert Wong. In a politically sensitive environment, in which the philosophy of environmental educators is not a high priority, public relations and stringent negotiations were an almost daily reality. Besides being involved in these "external" issues, each was also active in one or both of the above groups.

Finally, Robin Moore, Herbert Wong and Don Young connected, coordinated and documented in many forms the activities of all groups, analyzed all documentation and communications, and provided the feedback loop from all areas to PEET.

This effort was directed and managed by Herbert Wong, with the assistance of Kay Bailey and Marge Graser who were not formally

a part of PEET but whose secretarial, clerical, bookkeeping and communications work was absolutely indispensable to the process.

The Target Groups

PEET targeted its activities at three groups--students, school staff, and the broader community, the latter consisting of not only parents and school district personnel, but also students of the University of California and numerous other interested parties.

The Project Goals

There were two overall project goals which can be divided into three more specific goals. The most immediate goal was "to integrate the indoor-outdoor school environments in such a way that both the staff and the students would find the entire school site a whole learning environment (pages 3 and 4 of Grant Application)." In order to achieve this the school staff had not only to look favorably upon the outdoor environment, but come to know it and internalize or feel for it as they do their own indoor classrooms. Students had to continue to find the outdoors an enjoyable place, and at the same time be directed to experience it as a learning place, not only in a general way, but also in structured "classroom" situations. The major thrust with the staff was thus to educate them about natural systems and to encourage them to value them highly. With the students, the major thrust was to encourage them to understand that learning and play can be interrelated, i.e., that learning can occur in play environments under the leadership of adults. The broader community had to be fostered into supporting and even encouraging such an environmental perspective.

The second overall goal was to document the process described above in such a way that it could be intelligently implemented elsewhere. This latter goal can be divided into two parts, 1) documenting why such a program is necessary, and 2) describing how the program is conceived, planned, designed and implemented.

Summary of Project Goals

Briefly then, the project goals were, 1) to facilitate teaching and learning in the whole environment, both covertly in informal play situations and overtly in more focused formal situations, 2) to demonstrate why this bipolar orientation is necessary and 3) to demonstrate how it can and must become a reality.

Part Two: Staff Initiated Integrative Activities

The following is a chronology of events and activities instigated by PEET to facilitate ekistical[1] teaching and learning among students, staff and community. These activities constitute a core product of the project, being the result of the integration of staff, students, community within the framework of the previously stated first general goal.

Chronology of Student-aimed PEET and Staff Activities:

Monthly Summary[2]

September - School district employee strike; staff inactive.

October - Approximately 30 activities logged by eleven of eighteen classroom teachers together with four PEET outdoor resource people and students from a U.C. Berkeley course in Environmental Education and Design. Activities focused on gardens, observing, mapping, weather recording, lessons on habitats and general ecology, journalizing (by individual students), and pond ecology (Appendix B).

November - The same people led approximately 30 activities: in populations, environmental values, vacant lot ecosystems, environmental awareness, gardening, aquaria, flower reproduction, weather study, Yard maintenance, exploration, or "discovery", seed study, and greenhouse/indoor gardening.

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[1] "The authors propose the use of the term ekistics, which is defined as that field of study, that area of knowledge, and those concepts and values through which man recognizes his interdependence with the environment as well as his responsibility for maintaining a culture that will sustain a healthy and sanative environment." From Ekistics: A Guide for the Development of an Interdisciplinary Environmental Education Curriculum. California State Department of Education, Sacramento, 1973.

[2] Taken from Log, appendix A.

December - Approximately 40 activities logged by the eleven teachers with the addition of two more teachers (bringing total to 13 of 18). Work begun in October and November continued with the following additions: studying sounds, composting, making weather instruments, studying living and non-living things, logging progress of vegetables, compost and weather, studying water, learning names of plants (duckweed, etc.), and other exploratory things. The major project initiated was eating outdoors on the Yard with a "Litter Parade" following in which two children from each class in the school participated in collecting litter.

January - At least 37 activites logged, by about eight of the previous teachers and one new one, a reading specialist.* Activities focused on litter parade, garden, and maintenance work, but also included weather, pollution, aquaria, white mice, study of rain, the burial of a dead mosquito fish from the pond, and other garden-related activities already mentioned.

February - At least 32 activities logged by those who are by now recognized to be the "hard core" E.E. staff, about six to ten teachers. They continued with previous activities plus beginning a massive tree and shrub planting program with measurement spin-offs, some poetry, writing, earthworm cultures, painting a life-size whale on the asphalt and taking field trips.

*Decrease in names does not necessarily mean a decrease in teacher involvement, as some activities were carried on for a long time, and were not continually updated in the log.

March - The big activity in March was the beginning of a group of students who met each Monday to relay to their classes E.E. activities that had occurred during the preceding week. On March 29 they published an "Environmental Yard News" bulletin of ten pages (see end of appendix A.)

April - One of the teachers who was also a PEET member conducted his class and it's curriculum on the Yard the entire day--a historic first for Washington School. In other classes previously begun projects continued. The annual "Yardfest" was scheduled for Saturday, May 8, and classes began preparing for it. Interested classes began making huge Environmental Banners to display on the school's exterior walls.

May - In preparation for the Yardfest a hen, rooster, ten chicks and eight ducklings were penned in the Yard, under the supervision of one of the classes. The Yardfest took place on schedule, the biggest attendance to date (Approximately 1300 attending). On May 24 work began on another large Yard project, the creation of a huge four-point compass painted on the asphalt.

June - Two frogs and a turtle were introduced to the pond ecosystem, and many captured insects were released for the summer. Preliminary work was begun to implement the "environmental alphabet" in the fall.

At least two hundred activities were logged by eighteen teachers, ranging from 24 activities to one activity per teacher. An activity is defined in this paper as a staff or student initiated, formal occurance involving the student being directed by the adult in some kind of learning experience. They began either on the yard or in the classroom, and almost always evolve to the other location.

It cannot be assumed that there were only these two hundred activities, or that teachers actually engaged in only up to twenty-four of them. Some of the activities listed were very specific, one-time events, like going out and planting a tree. But many of them were daily, recurring events, like recording the weather, that were counted as only one activity. Teachers, (as will be mentioned later) did not like having to record all of their E.E. activities, and the PEET staff was not always able to record activities for teachers, so some were certainly missed. Finally, in a very broad sense, all activities can be understood to be E.E. activities, and it is sometimes difficult for the teacher to distinguish what the PEET staff considers to be environmental education. However, the broad range of from 24 to 1 activity is indicative of a breadth of involvement in E.E. among the staff.

We believe the wide variety of activities already discussed is ample evidence of the importance of having a rich, diverse physical environment rather than just an urban expanse of asphalt or a suburban or rural expanse of neatly mowed lawns. Beyond those two hundred activities listed, there is an infinite number of spontaneous, unrecorded activities that the children engaged in independently of adult supervision. Just on the day of this writing during lunch recess a group of boys discovered a large banded orb-weaving garden spider eating a green bottle-fly on a baccharis shrub. They were fascinated. They had never seen so large a spider before, let alone one eating a fly. Beyond that they discussed values issues like whether they should kill it, be afraid of it, leave it, or what. These kinds of happenstance meetings of children and nature occur at regular intervals, and each time reconfirm us in our conviction that E.E. can only

effectively occur in an environment regularly attended by the children. The spider was not some oddity seen during an infrequent park visit, but was confronted at a regular lunch time--a natural, self-sustaining Yard element.

When the logged activities are plotted on a plan of the Yard, (next page) two garden areas, the big pond, the compost area, the greenhouse, the redwood groves, about six classrooms, the pine area, the chaparral area, the birch/willow area, and the whole Yard in general stand out as primary Environmental Learning Stations (ELS). Predominant activities focusing around these areas are garden-related activities and general exploratory activities ranging from weather observation and recording to smelling and touching exercises.

Chronology of Staff-aimed PEET Activities

October - December: Six day-long entry sessions* with about seven different staff members at each, focusing on:

a. philosophy of E.E.
b. use of WEY by children and teachers using role-playing techniques
c. function and use of "Seed Cards," E.E. activity cards developed by PEET teachers,
d. feedback and evaluation from entry participants,
e. implementation of PEET, covering logistical and procedural matters, and
f. work time to develop own areas of interest.

*Appendix D.

January - March: Four day-long "brainstorming sessions"* of 7 classroom teachers at each discussing problems of initiating E. E. in classroom, implementation of seed cards, creation of new seed cards, and concluding with an environmental education values exercise devised by PEET.

April - June: One after-school, full staff meeting to generate more "seed cards". Four "seed card" development meetings by six interested teachers refining those cards previously generated.

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*Appendix E

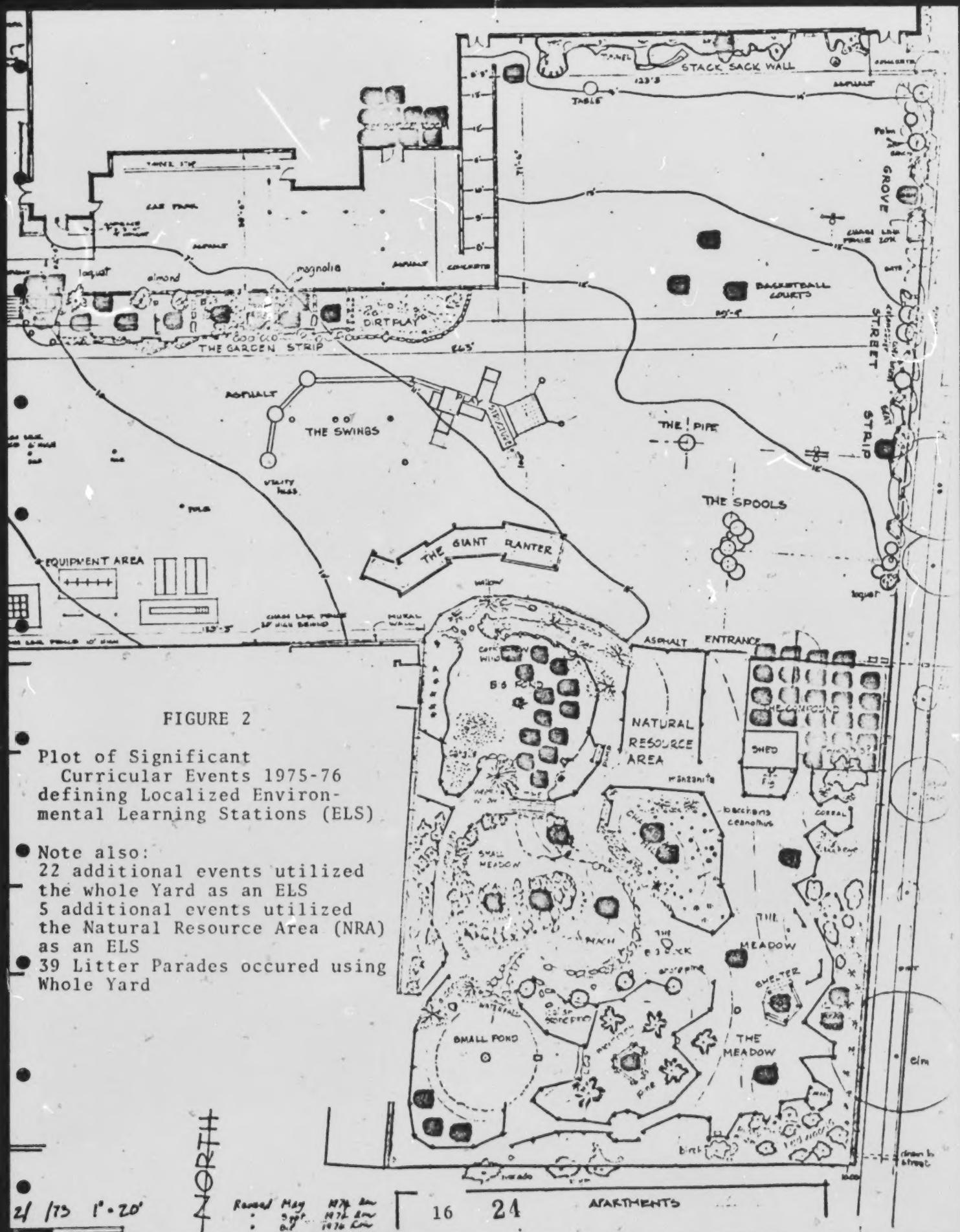


FIGURE 2

Plot of Significant Curricular Events 1975-76 defining Localized Environmental Learning Stations (ELS)

- Note also:
  22 additional events utilized the whole Yard as an ELS
  5 additional events utilized the Natural Resource Area (NRA) as an ELS
- 39 Litter Parades occured using Whole Yard

June: Private conferences by Dr. Herbert Wong, Project Director, with individual teachers regarding year's E.E. related work.

Chronology of Community-aimed PEET Activities

September - February: Due to an accident in the big pond during the summer, public health officials and the school district's maintenance supervisor became quite concerned with various health, hazard and maintenance aspects of the ponds. These concerns were gradually taken care of. A more detailed account can be found in appendix F.

September - June: The teacher's strike during September also precipitated a great deal of chaos in the school district, to say nothing of hard feelings, making business transactions with the school district's central administration difficult and time consuming. A great deal of the project director's time was siphoned off due to these events, and much of that time was spent in an effort to restore an atmosphere of normalcy in which the project could grow. These political/value issues cannot yet be discussed in any impartial, concise manner.

March: PEET representatives met with the local neighborhood association, presenting a slide show of work ongoing in the project and petitioning their support in getting a street that bisects the school closed. The association gave its support, and the joint group is now applying for State money.

April - May: Representatives of PEET, parents and staff met to plan the Yardfest, an annual festival involving the whole Berkeley community at the school. Its primary role is in

bringing strangers to the school to see the Yard and come to get a better idea of the ongoing E.E. activities. (appendix G)

May - June: After a series of meetings to discuss dissatisfaction with many aspects of the School District's education administrative policies in their negative effects on Washington School, the Washington Action Group (WAG) was formed. WAG encompasses the interests of parents, children, teachers and friends of the school in maintaining the quality of its program and environment. Therefore continuance/maintenance of the E.E. program and the Yard resources feature as a high profile concern, voiced to the central administration.

Dr. Wong and PEET members working with teaching staff.

Part Three: The Purposes of Project WEY Demonstrated

The second goal of this project was to make our efforts replicable. We have listed briefly what was done, and have expanded upon it in a number of appendices. Now we must, to make the project meaningfully replicable, discuss why it was done, to give the project purpose, and then how it was done, to give it technique.

The following is a list of all documentation engaged in with a brief description of the kind of findings made, aimed at demonstrating the conclusion that an environmental Yard like Washington's is critical to E.E. at the kindergarten through fourth grade level. In the appendices a more inclusive presentation of the data can be found.

Student-Involvement Documentation

The following five documentation exercises were given to students during the school year.

STUDENT LOG: Throughout the year PEET kept a log of all activities relevant to student learning (appendix A). As has been mentioned, analysis shows that approximately two hundred activities focus on eleven Environmental Learning Stations: two garden areas, the compost area, the greenhouse, the pond, two redwood areas, the pine area, the chaparral area, the birch/willow area and the Yard as a whole.

The logged inventory of more than two hundred activities involved each student at least once, and most students most of the time, depending mainly on the interest level of the classroom teacher.

STUDENT MAPS: Three hundred and fifty eight children (164 boys and 194 girls) made maps of the school site. It was found that the following elements were mapped by at least 100 children. (See appendix I for complete list, ranking and next page for samples).

Area of Yard	Total %	Boys %	Girls %
Aquatic, Asphalt, Other			
Big Pond	55	64	48
Equipment Area	49	41	57
Small Pond	37	45	30
Structure	35	42	28
Creek/Beach	34	37	31
Sun	34	28	38
Trees/Bushes	32	26	36
Spool Structure	30	34	27
Children	30	34	27
Bridge	29	33	26

Assuming that children put on their maps those elements that are most clearly impressed upon their minds, and that, in turn, those elements are most familiar to them either because of use or visual impression, the most obvious conclusion is that the aquatic area as a whole, the gymnastic equipment area, and the two structures are the most "popular" items. Vegetation in general is also very popular. The frequent mentions of aquatic, asphalt and dirt area elements indicates to us a healthy balance between urban and non-urban elements in that neither environment is totally rejected or universally endorsed.

The inclusion of children and a sun (which often contains a smiling face) indicates a positive social orientation in the children as well. These indications of balance and positive orientation are reinforced in other pieces of documentation.

Analyses are being made of these data based on age and sex, but have yet to be completed.

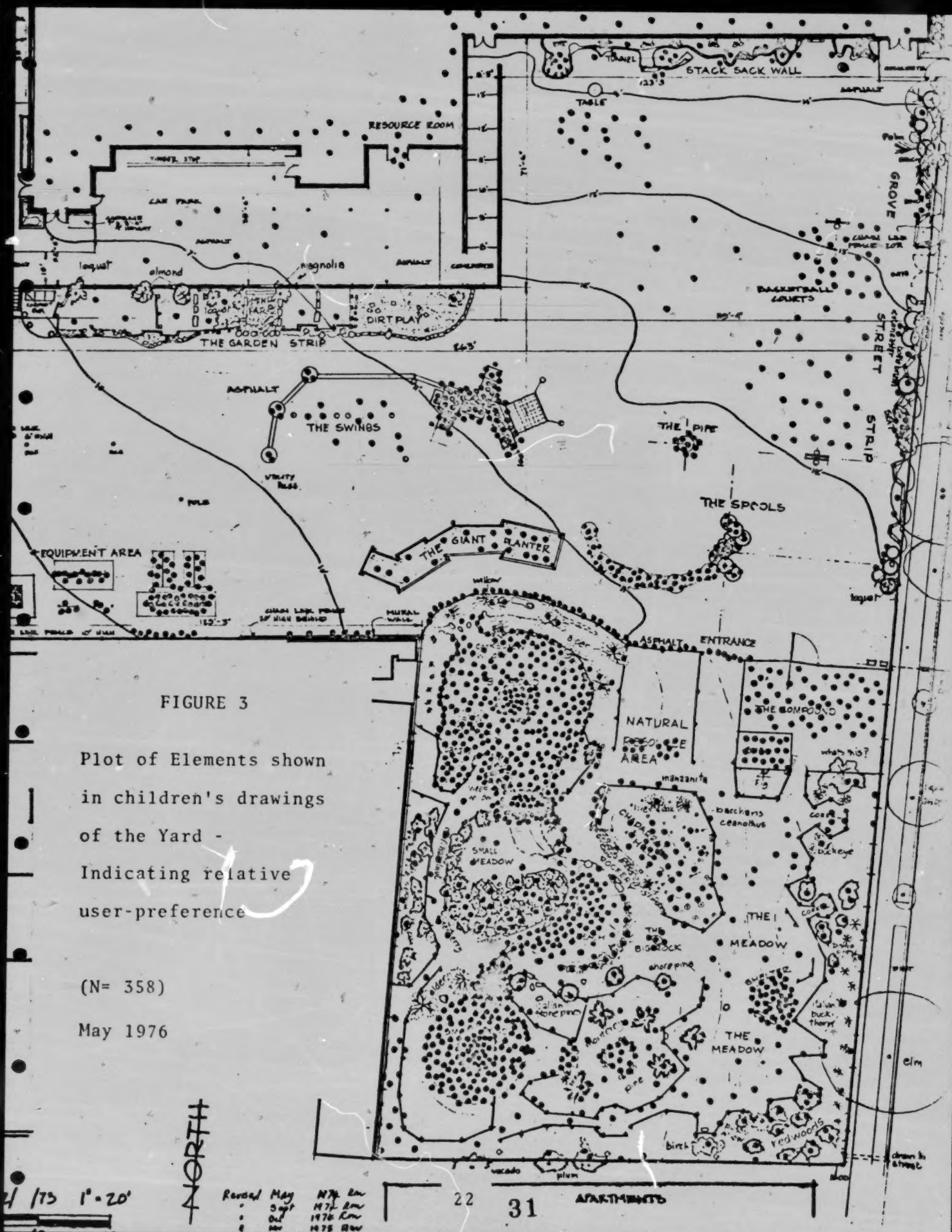
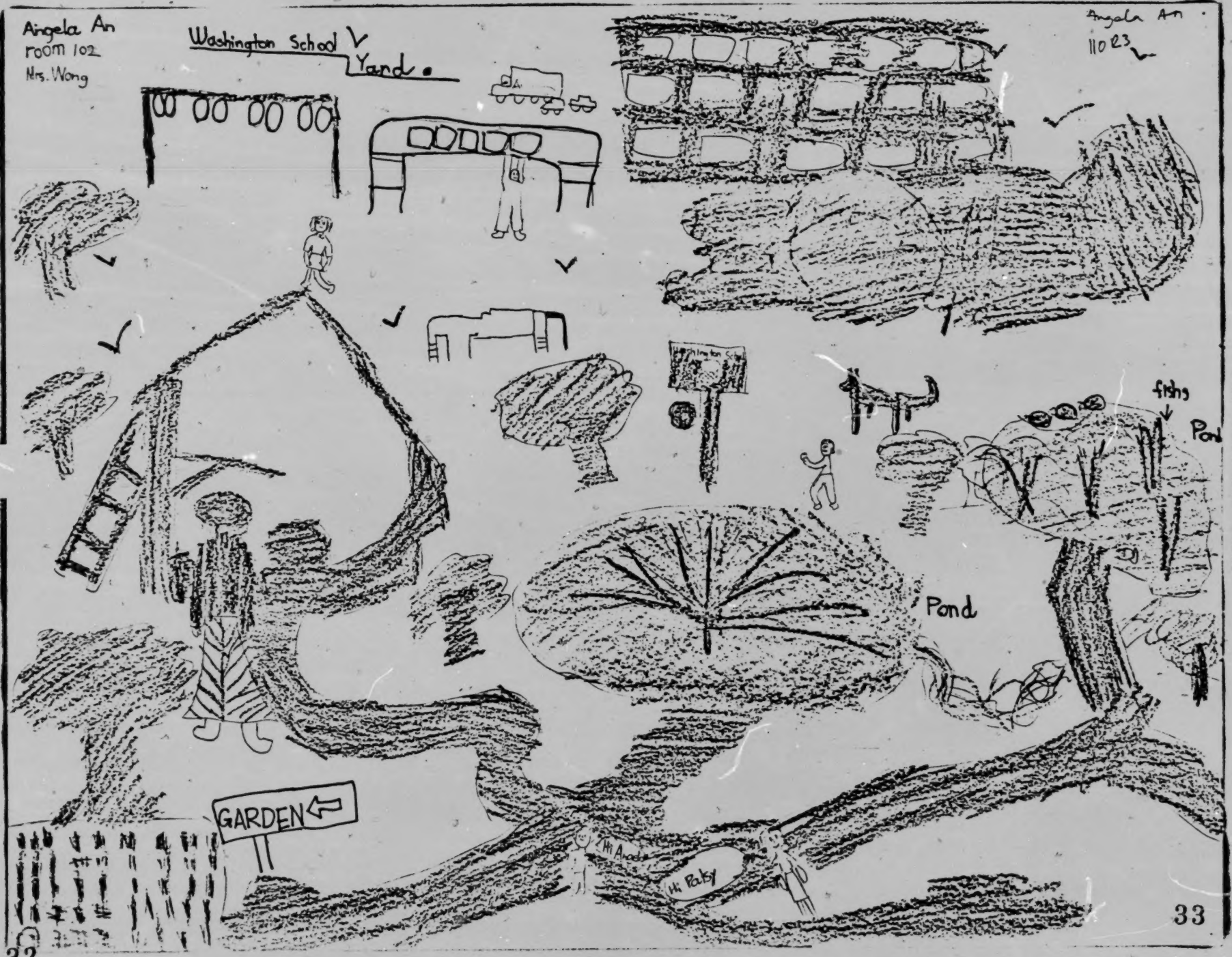


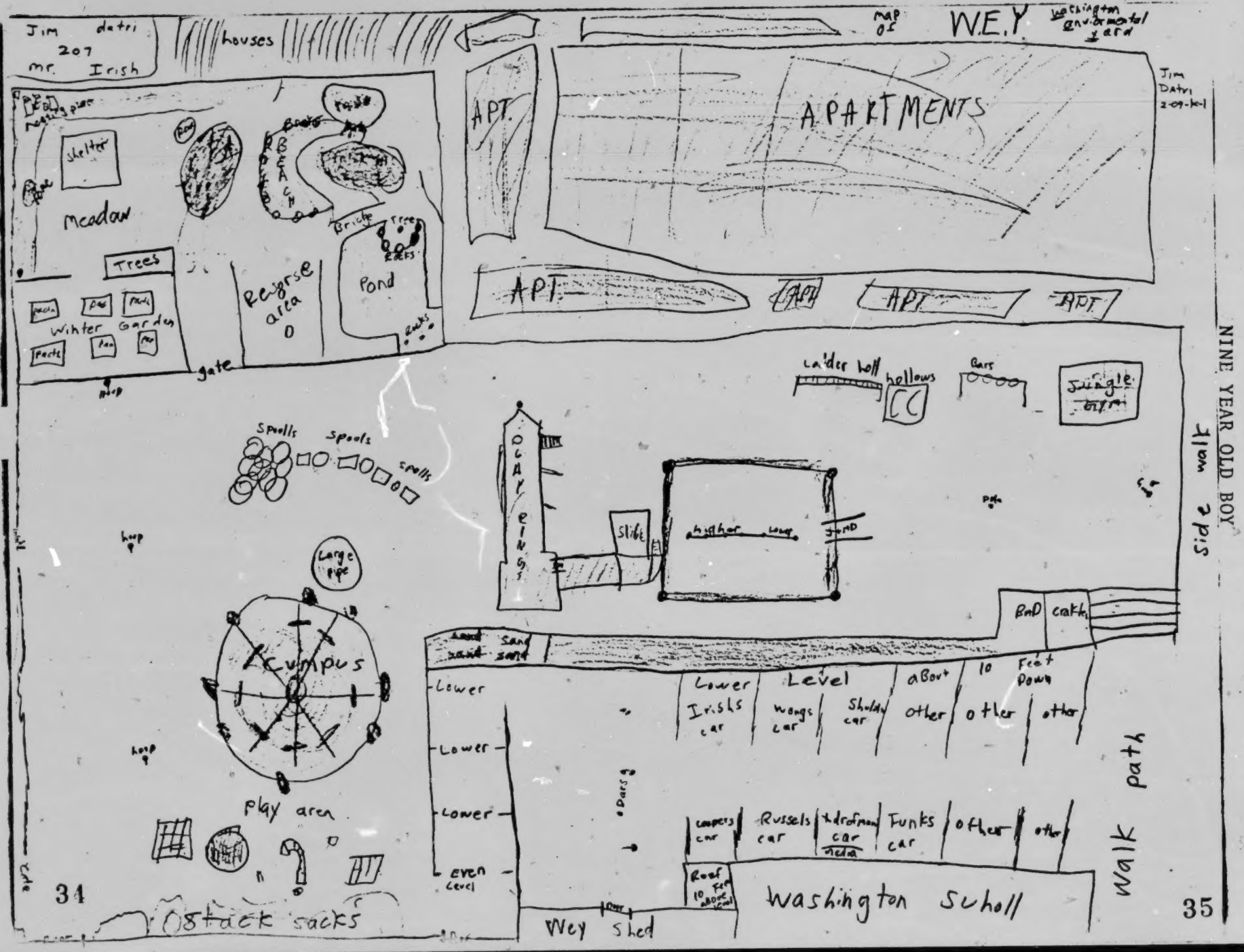
FIGURE 3

Plot of Elements shown in children's drawings of the Yard - Indicating relative user-preference

(N= 358)

May 1976


Angela An
room 102
Mrs. Wong
Washington School Yard.
Angela An
11023
fishing Pond
Pond
GARDEN
Hi Angela
Hi Baby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APARTMENTS
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shelter
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BEACH
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Trees
Trees
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Pond
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Spools
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OCAY RINGS
Slide
Large pipe
Campus
play area
Obstacle sacks
Lower
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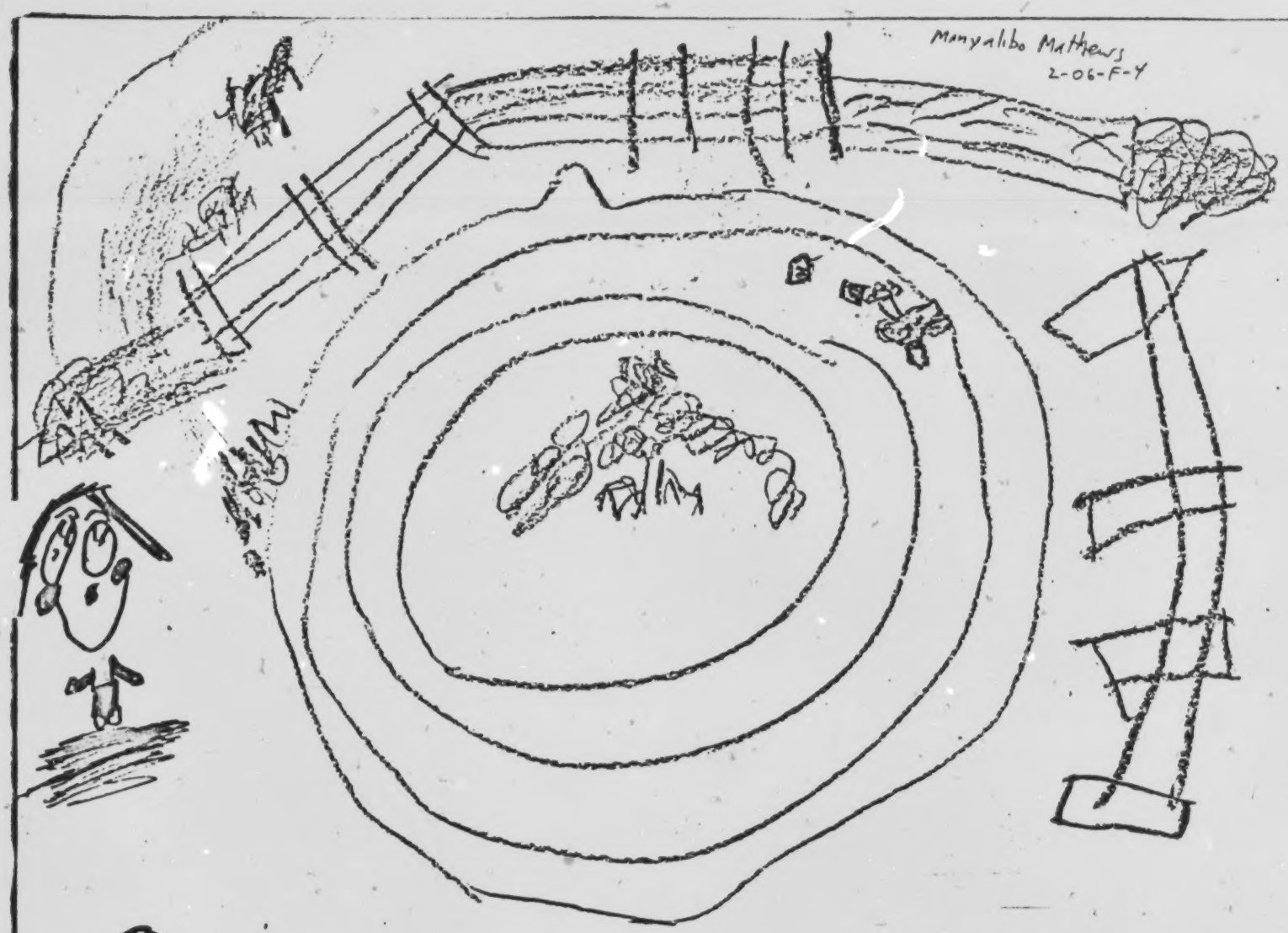
Lower Level
10 Feet Down
about
Irish's car
wongs car
Shirley car
other
other
other
Campers car
Russels car
Funks car
other
other
Roof 10 Feet above level
Washington School
Wey shed
walk path
NINE YEAR OLD BOY
Jim Davis
24
31
35

Sinae
Room 200
MRS. RUSSELL
SINAE HOME NOT-NL
Sun
Slide
Birds
Birds
rings
monkey bars
Pole
logs
Bars


Manyalibo Matthews
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STUDENT QUESTIONNAIRE: Four hundred and thirteen students answered a simple nine item, open-ended questionnaire (see appendix J for sample and transcripts). The preliminary results of this questionnaire show that the greatest number of children like the pond the most of all places on the Yard (121 children, 30% of total). They also like to do a greater variety of things, in greater numbers at the aquatic areas (the two ponds, stream, waterfall, bridge and water-related plants) than they do in any other kind of area.

Favorite activities children said they like to do in the aquatic area included the following:

1. catch fish - 27 children
2. play by the pool - 8 children
3. float boats - 7 children
4. jump over stream - 4 children
5. look at fish - 3 (or 4) children
6. walk in stream - 3 (or 4) children
7. look at pond - 3 children
8. return fish - 2 children
9. catch frogs - 2 children
10. play in the pond - 1 child
11. watch kids - 1 child
12 sit by waterfall and think - 1 child
13. watch stream - 1 child

Total - 63 children

The second most popular area was the equipment area (consisting of a horizontal ladder, two single low parallel poles, a set of poles with loops on them, a set of high parallel poles, and a monkey bar set. This area was the favorite place of 39 children (about one half the number of the pond). There were seven "favorite things to do" in the equipment area for 39 children as follows:

1. "play" on monkey bars, bars, rings, poles - 29 children
2. (twirl) flip over bars - 3 children
3. hang on bars - 2 children
4. climb on bars - 1 child
5. swing on bars - 3 children
6. "chicken fight" on bars - 1 child

Total - 39 children

There is a marked contrast between these two areas in the kinds of things to do. In the equipment area the "things" done are almost exclusively motor developmental activities -- hanging, climbing, twirling and swinging. Observation shows that the general category of "play" consists of these activities plus chasing, resting and talking. The latter is the only non-motor skill oriented activity. In the aquatic area the children engage in motor developmental activities, but they are camouflaged in other things to do. Catching fish and frogs requires balance and fine-motor coordination. Those activities and jumping over the stream require gross-motor coordination and strength. Beyond these skills, children are interacting with and consequently learning about the moving and changing water, and the living organisms associated with it--fish, frogs, kids and vegetation.

They are also enjoying the passive, restful activities like looking, walking, watching, and sitting. These activities are passive only in the physical sense, as they are in fact types of observation, integration and learning.

From this data it must be concluded that the aquatic area is more attractive to children than any other area, that it provides a broader experiential range and a greater number of specific experiences than any other area.

At this point it should be pointed out that there are evident qualitative differences in the children's play as well. At the equipment area all activities but talking are oriented toward physical mastery, whereas in the aquatic area it is only a part of what goes on there. Children also spend time quietly in contemplation or observation, assimilating experience and interacting with the physical environment in a way that is not related to mastery but integration.

It was said in the discussion of the children's maps that the portrayal of sun and children indicates they are well disposed to the Yard. The questionnaire reinforces this strongly. One hundred and fifty three children (more than in any other response regarding the Yard) said they felt "happy", and one hundred and twelve said they felt "good". Most of the other children responded with other kinds of positive words.

Of the four hundred thirteen children, only fifty three children gave what could be considered either negative or ambivalent responses, ranging from "bored" (11 children) to "sometimes happy and sometimes sad" (6), to "regular" (5), and so on. In response

to the related question "What don't you like about the Yard?", 88 children said they didn't like fighting behaviour, including everything from meanness (20 children) to teasing (3 children). Other responses that indicated possible negative feelings about the yard had to do with litter, which was disliked by 28 children. In response to the question "What would you like to see changed on the Yard?", 41 said they would like to see the ponds cleaned up and 16 said they wanted the litter removed. (The issue of the "dirty ponds" was perhaps the most heavily debated "values" issue of the year among all target groups. The ponds were, from an ecologist's perspective, jumping with life. But duckweed and elodea covered the surface of the pond, and the water was not transparently clear. Many wanted a splash pool or some other more sanitized water environment that could be safely played in. The creation of such a pool is in the plans, awaiting funding. Litter was also a problem in that many children ate lunch outdoors, and rather than putting their garbage in the cans provided, some left them on the ground or threw them into the ponds.

While the large majority seem content with the Yard, describing themselves as happy or feeling good, and also disliking "nothing" (62 children), and wanting nothing changed (97 children), there remained a distinct but very small minority who either disliked fighting behaviour or messy ponds and litter, or both. This minority also existed among the staff and parents--presenting a distinct but minor values confrontation issue at WEY.

In summary, the questionnaire and map exercises support each other in the finding that the children are responsive to a broad range of environmental stimuli on the Yard, and positive in their attitude toward experiencing it. Also, the overall prominence of the aquatic elements is clearly expressed. The questionnaire further introduces the existance of a dissenting force who feel negatively, who don't like the litter, who want the messy ponds cleaned up, and finally who feel threatened by mean kids. However, it is a distinct minority.

ENVIRONMENTAL ALPHABET: All classes in which there were 4th graders were asked to complete an environmental alphabet. (appendix K). Eighty-four students listed object, feeling and action words alphabetically from A to Z, from which the most common words were to be put on some large plywood sheets and hung on fences around the playground. The children made 1,441 "object" entries, which consisted of 393 separate words. These words were analyzed to determine what kinds of words the children associate with the Yard. The 15 most commonly used words were the following:

Dirt	37
Water	36
Kids	35
Yard	34
Pond	33
Trees	33
Animals	32
Asphalt (cement, concrete also)	27
Junk	25
Rocks	22
Fish	20
Grass	18
Bird	17
Ball	16
Bugs	16

This list represents a partial compilation of the elements in the "mental ecology" of the Yard. Its most obvious elements, at least to the children, are dirt, water, kids, animals and vegetation.

Latent in this list is what may be interpreted as an unfortunate occurrance. In the map and questionnaire exercises, man-made elements associated with the asphalt area particularly the equipment area, the structures and the ball play areas all were seen to be very popular. This list indicates that they are not, however, seen to be part of the "environmental" Yard. There is the distinct possibility that some children have been learning the false dichotomy that adults in general have learned, in which "natural" is confused with "environmental", and "man-made" is disassociated from it and considered nonenvironmental. Such a dichotomy is clearly reinforced by the spatial structure of the Yard, itself, since the natural resource area is located at one end, demarcated by a four-foot-six-inch-high fence, and entered by a gate (a Department of Public Health requirement (see "Pond Closure" appendix F for details). Hence there is an obvious need to integrate the vegetated areas and asphalt areas in some way.

On the same subject, it is gratifying to see that the children do include in their conception of "environmental" discrete objects covering a wide range of characteristics, including the asphalt, junk, balls, and such seemingly inconsequential things as rocks.

The more complete list in the appendix gives an even stronger impression of the breadth of their conception of the word "environment."

The 84 children also listed 738 "feeling word" entries, for a total of 264 separate words. The words mentioned most often in the environmental alphabet were the following:

quiet	29	large	11
nice	28	queer	11
happy	22	bad	10
fun	18	bored	10
dirty	15	great	10
dumb	14	interested(ing)	10
incredible	12	beautiful	9
kind	12	good	9
mad	12	like	9

It is extremely interesting that the most commonly used feeling word is "quiet". In the student's questionnaire, already discussed, there was some indirect indication that quiet was prized, but nothing so strong as this. In the questionnaire, in response to the question "what do you like to do in the yard", some students wrote the following:

walk around	6 children
look at things	2 "
sit on a rock and think	1
sit and think	1
sit by waterfall and think	1
think	1
watch the river	1
TOTAL:	13

As well as doing these at least potentially individual things children also listed these quiet, group activities that they liked doing on the Yard:

talk with friends	6
talk	5
wander in mud area and talk	1
walk with a friend	1
sing	1
TOTAL	14

Observation shows that most of the fish-related activity, i.e., catching, returning and looking at the fish, was quiet, usually engaging each child individually or at most in groups of 3 or 4, and lasting for many of the children, through the entire noon recess (at least 30 minutes). The activity was the favorite of 32 children, according to their responses on the questionnaire.

A final "quiet" activity popular on the Yard was eating lunch. There are three areas on the Yard where eating is encouraged, and at each location, plus a few other ad hoc locations, the eating usually lasts for about 10 minutes with each child and involves minimal activity.

It is our major hypothesis, however, and one that we hope to study soon, that the "quiet" is directly attributable to the aquatic system specifically, as it is there that most of the quiet behavior listed above occurs. If the hypotheses proves sound, a further argument for the presence of an aquatic system will be established.

That "nice, happy" and "fun" are the next most often used feeling words is not surprising, given the strong use of those works in the questionnaire. The use of these words further reinforces the idea that the Yard is well liked.

The presence of the negative words "dirty, dumb, mad, bad", and "bored" in the middle of the list indicates the presence of that distinct minority who do not value the Yard as do the others. A look at the entire list reveals that the group who responds with negative words is actually quite small.

Nine action words were used at least 9 times, of a total of 162 separate words listed a total of 473 times. These words are:

run	22	accident	10
jump	21	beat-up	10
open	19	quick	10
eat	16	hide	9
play	15		

This list contains no additional surprises but it does reinforce the diversified, positive, engaging and interactive orientation of the children, with the minor theme of negative qualities like "accidents" and "getting beat-up" coming through. These figures also show the significance of certain activities like "eat" and "hide" that are not possible on a conventional asphalted yard.

TAPED INTERVIEWS: Twenty pages of typescript anecdotal data were collected, documenting the unsupervised play of the children on the Yard. This script is contained in Appendix L. The following is a sample conversation, demonstrating the mix of enthusiasm, knowledge, environmental values and social compatability of the children. (R= recorder, S= student, Ss= students)

R: You say there's a frog here?
S: Yes, I touched it and it went away into the bushes.
R: Seen anything else besides frogs in the pond?
S: There's mosquito fish.
R: Do you catch them?
S: Sometimes.

S: The frog jumped right out over there. I hit him with a rock. There's four of them. There's a lot of them. He was on a board, then he jumped over there into those reeds. I see him. There's a thousand of them. See that little baby one. (Actually there were only 2 in the whole pond, placed here by a class.)

(A kid showed me a milk carton filled with different stuff and said "look at my man-made potion.")

(Two kids walking with milk cartons of fish.)

R: Where you taking the fish?
Ss: To hide them.
We can't take them in our classroom.
I'm donating mine.
Let them breath...give 'em a little breathing space.
I've got eight fish now.
(They hid fish behind plants by the bike stand to take home after school. Kids said (teacher R) poured them down the drain last time.)

FOURTH GRADE MAPS: A special study was done with the fourth graders prior to their graduation from Washington School (Appendix N). Twenty-nine girls and twenty-one boys were asked to rank on a prepared map their favorite and their least favorite play places. The interesting finding was that the 4th grade boys preferred ball games (basketball, kickball, soccer and football) to doing anything else or to any other place (26 mentions) The climbing structure, where they play chase games, was liked second most (18 mentions), and the aquatic system came in a distant third with 10 mentions. The girls on the other hand, liked the equipment area most (31 mentions), the aquatic system second most (27 mentions) and the structure third (20 mentions).

The preliminary indication seems to be that the boys have begun to tire of the aquatic system (and of the environmental Yard in general), preferring organized games and team sports to the more exploratory and nonruled play the yard is oriented towards. It is equally possible that the shift is indicative of a new interest in socially oriented activities, as those are represented by team sports. This play requires cooperation, subordination of self to group, shared good will, etc., all of which develops socialvalues. If the latter hypothesis is correct, the boys are merely experiencing a normal, maturational process. It is also possible that the

ball-playing emphasis represented the 'Seasonal bias' at the time of the study. Earlier studies of the Yard indicate that the pattern of activity may not be consistent, but subject to seasonal shifts.

The evident social orientation of the boys was reflected in the girls' play as well. The equipment area was very popular with them, and was generally densely populated. Activities there include a great deal of verbal intercourse and the teaching of new techniques to one another. Their use of the aquatic and dirt areas is also generally more passive, and oriented toward quiet social interaction within a fairly confined space.

Students working in Garden, monitoring growth, 1976.

Staff Involvement/Participation Documentation

The involvement of the staff in the project is indicated by the number of activities logged and by their answers to a questionnaire.

STAFF LOG: At the end of the school year, the log was reorganized to show the activities each teacher engaged in throughout the year. This list was shown to the teachers so that they could add and record omissions. The final list shows that teachers ranged in the number of E.E. activities their classes engaged in, from 24 activities to one activity, involving from 22 named students to one named student, with the activities occurring a total of at least 32 times to at least one time (see table) (Most classes had activities that included the whole class; the list discussed here is of those students who were named as doing specific activities other than as a class.)

Teachers K-K are two teachers, one of whom replaced the other when she took maternity leave. These two and teachers P and R will be dropped from further discussion because of their brief tenure at WEY.

The 15 teachers who were on the site for at least a year have been placed in four groups, of matching degrees of involvement in the project. For example, teachers A and B did more activities than teacher C, but the latter did them much more frequently. Both teachers E and J did 7 activities, but teacher E involved 20 students 28 times whereas teacher J involved only 12 students 9 times.

CLASSROOM TEACHER PARTICIPATION IN E.E. ACTIVITIES

PEET Grouping	Teacher Code	Grades Taught	No. of Activ's.	No. of Students	No. of Occur's.	Years at WEY
I.	A	1,2,3,4	24	--	31	10
	B	2,3,4	23	22	32	15
	C	K	18	18	42	2
II.	D	1,2,3	10	26	34	11
	E	2,3	7	20	28	15
	F	1,2	8	16	15	2
	G	1,2	9	13	17	3
	H	2,3	6	26	31	1
	I	2,3	6	23	26	8
III.	J	1,2,3,4	7	12	9	10
	K-K	2,3,4	4	19	26	--
	L	2,3	4	15	28	8
	M	1,2	3	15	26	11
	N	K	3	15	21	14
IV.	O	K	3	2	3	10
	P		1	2	2	0.6
	Q	K,1	1	1	1	10
	R	K	1	1	1	0.4

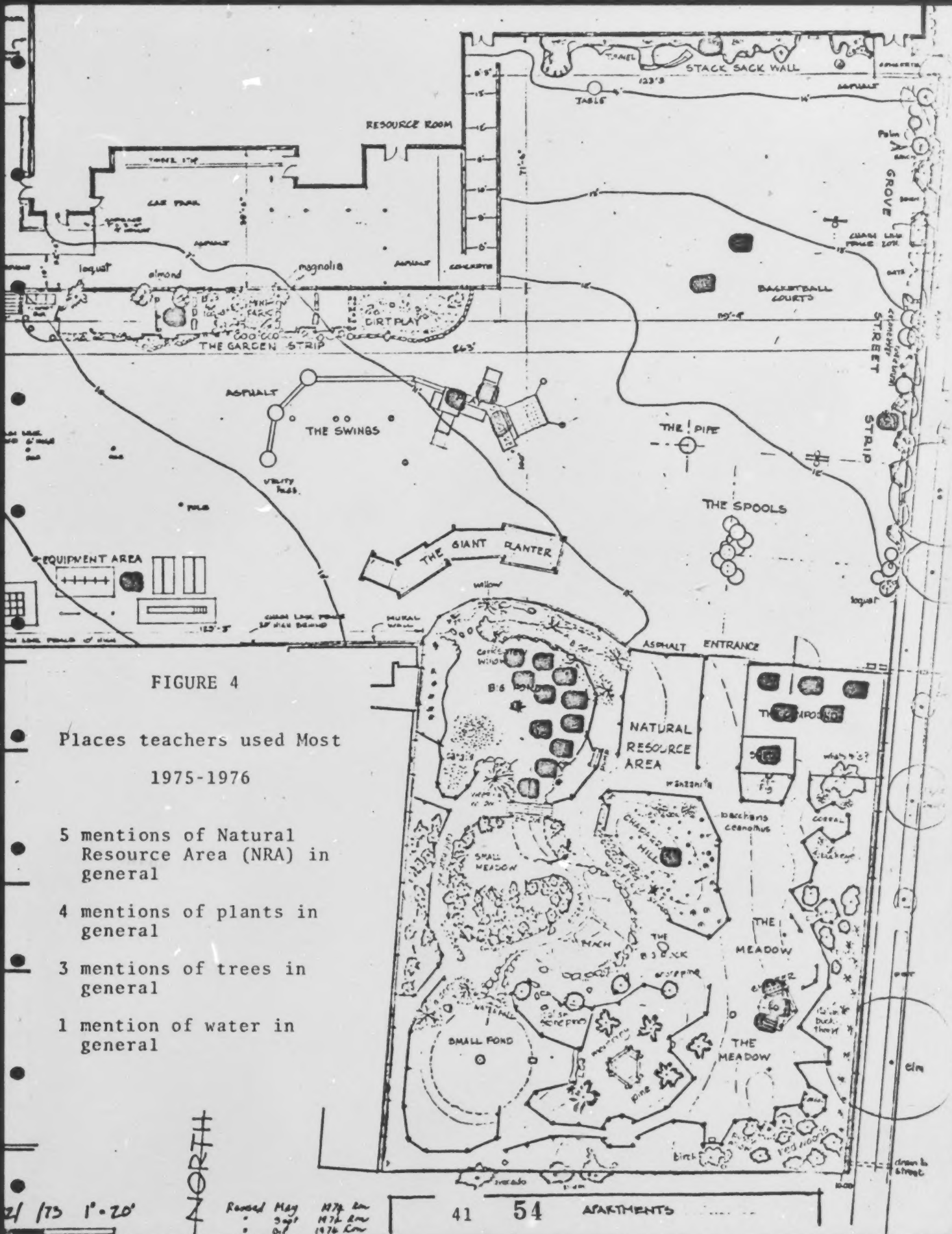

FIGURE 4

Places teachers used Most

1975-1976

- 5 mentions of Natural Resource Area (NRA) in general
- 4 mentions of plants in general
- 3 mentions of trees in general
- 1 mention of water in general

There is a rough correlation between the grade taught and the ranking of the teachers, with several important exceptions. Generally, the higher the grade, the more likelihood of participation in the project. The kindergarten teachers tend to be in group four, and the 4th grade teachers split between groups one and three. The first through third grade teachers are generally in the middle. The important exceptions are teacher C, who is a kindergarten teacher, and teacher J, who has first through fourth grades. There are other minor exceptions: teachers F and G had first and second graders but are in group two, and teacher L, had 2nd and third graders but is in group three. These exceptions all demonstrate that grade level taught is not necessarily linked to either active or lackluster involvement.

Tenure at the school also does not correlate with involvement: (with the exception of those who have been here for one year, who are not being considered in this analysis). Teachers who have been there for 10 years or longer can be found in all four categories. Teachers who have been there for 3 years or less can be found in groups one and two, perhaps somewhat more than expected.

A better determinant of the reason for teachers' involvement (or lack of it) can be gleaned by an analysis of their responses in the Staff Questionnaire.

STAFF QUESTIONNAIRE: At the end of the year all teachers (25 in total) completed a questionnaire (see appendix, O) designed to elicit their feedback assessments of the year's activities and settings. The contrast in questionnaire responses of teacher Q

with teacher C, both of whom are female kindergarten teachers, is instructive.

Both teachers take their children out on the Yard for informal purposes about one hour per week. Teacher C takes them out for formal purposes for an additional hour weekly while teacher Q takes them out .5 additional hours. The questionnaire indicates, as did the log, that teacher C engages in more activities, and more importantly perhaps, she also engages in more specific activities. Teacher C listed as the activities she had done this year:

> Developing awareness using five senses
> Planting--pumpkins, cotton, vegetables
> Weather unit
> Measurement unit
> Yardfest--tree planting.

Teacher Q mentioned the following:

> Planting
> Observation
> Exploration.

This difference in orientation toward the activities children might conduct on the Yard is carried over relative to the specific areas of the Yard used in curriculum activities. Teacher C finds the following "things on the Yard have been most useful in initiating curriculum activities:"

> Pond, plants, general atmosphere
> Pond--for five senses and plants and animal life for take-offs on class activities
> Planting areas--green house--planting, cotton, pumpkins, etc. objects such as trees, rocks, sticks--for awareness of five senses and for measuring activities.

To the same question teacher Q responded:

> Planted areas--pond--.

The differences between these two teachers carries beyond the activities they use, the places they conduct them and the richness of response to their attitudes toward learning itself. In response to the question "What parts/areas of the Yard do you never use? Why?", teacher C responsed:

> Climbing structure and concrete things to climb on--the children use these extensively, but I don't use them for class activities mainly because of this. I like to use areas where the children need to be encouraged to use.

At least two distinct thoughts are being expressed here. First, she attempts to optimize the childrens' range of experience by directing them to places she feels they would not normally otherwise go. The idea expressed about education is that it stems from experience itself, and that the broader the experience, presumably the better the education. Second, there is some advantage to children being encouraged to go to such places as the pond and the garden. To her, these places are not neutral, but positively valued elements that children in some way "need." Both of these judgments can be argued both ways, but it is certain that this value of hers is a primary reason for her ranking in the first category of environmental education activities at the school.

Teacher Q did not respond to the question of what places she never uses. She did, however, answer other questions in such a way that her general attitude comes through. In answer to the questions "In particular, how has use of the Yard helped you to formulate your ideas about E.E.?" teacher Q answered:

> "It's an extension of classroom experiences."

Her "norm" is the classroom against which the Yard is measured for its usefulness. Learning, by implication, begins in the classroom, presumably at the instigation of the teacher and her "curricular" materials. The Yard's function is as a reinforcment.

She does not recognize that learning occurs in both places, originating in the experiences of the children at both places, and that learning in one place influences, in a cumulative way, the learning that occurs in the other, i.e., that the formal and informal, indoor and outdoor domains in fact represent the total educative environment. Her attitude, while a faulty one, strikes us as being the predominant attitude among teachers and educators today.

Since, in this view, the primary learning place is the classroom, what is the role of the Yard? The answer is reflected in three questions. In response to a question asked what the teachers felt to be the three most successful elements on the Yard, Teacher Q replied:

> Slide--climbing bars and stack-sacking. These things provide the opportunity for children to build self-confidence in "doing something physical."

The obverse of this sentiment is reflected in answers to several other questions in which she stated apprehensions about children's safety on several of the structures.

The function of the Yard comes out as being to help the children develop a sense of competence or mastery over the physical environment, within bounds of "safety." Needless to say this is an

established goal of those concerned with traditional "physical education". It is an index of the traditional barriers that are reinforced in preservice and inservice education: work and learning occur indoors and play occurs outdoors. Therefore these attitudinal positions and values are reflected in the design of the school sites and the design of the curriculum in order to support a traditional goal. It is not, however, the only goal of Project WEY, or of an environmental education perspective.

The teachers' questionnaires also reinforce some conclusions arrived at from the student mapping and questionnaire exercises. It was said earlier that the children value the Yard positively, and it was speculated that fighting type behavior is far less on the Yard that at other schools. The teachers substantiate this in their responses to a question asking them to compare the pre-redeveloped school Yard behavior with current behavior; and behavior of children at other schools with the behavior of Washington School's children. The following are excerpted from their responses:

> There seem to be less problems on the Yard...less complaints about other children...reduced tremendously unfavorable 'incidents.'...the area is conducive to nonfighting...there does not seem to be as many conflicts on the Yard...there seem to be less fights...less need to settle arguments and/or fights in natural area....There seems to be less fighting... less friction and conflict is observable...much less hassle during recess now...More peaceful interaction...
>
> The children get along much better at Washington (than at Emerson)...Much calmer, fewer fights, less hostility (than at Longfellow or Whittier)...Calmer (than at Emerson)... There is much less conflict, children are more serene at ease with each other...children softer in tone, more reasonable, easier to communicate with (than at Whittier or Jefferson).

There were no teachers who felt the opposite--that the Yard created hostile situations, or that it had a tension-evoking atmosphere.

Spring Yard Fest 1976, from Grove Street.

Those who tried to attribute the reason for the children's improved behavior said it was because the physical environment provided the necessary challenges and stimulated the children toward imaginative, fantasy, adventure, exploratory play. The children, by competing less against each other, interrelated in more social behavior--exploring together, and sharing in cooperative actions.

Surely such an environment which fosters social cooperation rather than antisocial behavior, where children enjoy searching out and assimilating new stimuli, is by definition an 'educative environment'. A research task for the future will be to test this contention using more systematic, longitudinal quantitative assessment techniques, though the ultimate feasibility of this objective is open to question on methodological grounds.

Parent Involvement/Participation Documentation

PARENT QUESTIONNAIRE: The final source of data was from the parents (appendix P), one third of whom filled in a questionnaire devised by PEET. These showed that most parents also think that children most like water-related elements (63 of 113 parents), with the bars area being liked next (30 parents) and plant-related elements third (23 parents). In answer to a question about what they, themselves think is good about the Yard, most parents answered abstractly, referring to the Yard's utility, beauty, and the variety of natural and man-made elements. The water-related elements--especially the ponds, fountain, waterfall and stream--was the single most frequently mentioned element (34 parents). Many

parents referred to a broad range of positive qualities of the dirt and water part of the Yard having to do with growth, life, exploration, variety, and so on. "Living" elements like plants, greenery, trees, and flowers were also mentioned at frequent intervals.

Four parents liked the blacktop, three thought the Yard was too dirty, and one thought it was "well intended but poorly executed." Twelve parents named specific elements that are in the blacktop area. This small minority indicates a slight values conflict among parents regarding the Yard. The overwhelming majority however, consider the changed Yard a great enhancement and positive contribution to their children's education.

The parents' high regard for the Yard and the undertone of value conflict is reflected in another set of questions in which they were asked if they had noticed any positive or negative changes in their children as a result of using the Yard. Fifty seven parents (54%) said they had noticed positive changes and twelve parents (11%) said they had noticed negative changes. (26% said they had noticed no positive change and 70% said they had noticed no negative change.)

Shifting to a more academic realm, parents were asked questions about environmental education. Ninety-eight (86%) parents thought E.E. was important, none thought it unimportant. Parents range widely in their definitions of E.E., however, as the following quotes (representing about 1/5 of the responses) from our compilation indicate.

* Learning the value of protecting natural resources.
* Learning how we participate in our environment, observing how other beings do it.
* Picking up trash for five-year olds
* Learning about what's around you.
* Nature study.
* Becoming attuned to nature, learning to enjoy and preserve it.
* Study of environment, nature; also, learning through an enriched environment.
* Seeing/playing/working in spaces for and by kids to create and learn about ecology planning to make our urban space usable and to conserve energy--etc.
* ?
* Recognizing the living organisms that grow naturally in the world and their importance.
* Teaching children as well as adults how to take care of their environment.
* Imparting a sense of the realities of plant and animal growth vs. concrete.
* Jargonese for learning about the physical world.
* In the city, it means keep clean and natural as much as possible.
* N/A
* Educational jargon used for anything non-academic
* Active participation instead of looking at and listening to, as far as the environment is concerned.
* Increased knowledge about natures surroundings.
* How to live in the world without destroying it.
* N/A
* N/A
* Learning how to live in harmony with the Earth, and be supported by it.
* Nature study.

Some parents see E.E. as "nature study", a few cynics see it as "educational jargon used for anything nonacademic," but most refer to, or imply, such concepts as "harmony", "relatedness," "stewardship," and other abstract positive-feeling words.

A question that focussed more clearly on value issues was "what kind of environment do you think is most educational for elementary school children?" Seventy nine (70%) parents answered the question,

most of them giving complex answers that were reduced to several simple statements. The most obvious finding is that the word "environment" is responded to as both a social and physical phenomena. The general response to the social environment is that the environment should be "warm, loving, caring, accepting, cooperative, friendly, nonhostile, relaxed, unpressured, encouraging, sharing, flexible, thoughtful, contracting, community oriented and artistic" (a total of 29 parents making these responses). One parent may have summarized it for many by writing "one promoted and protected by loving, patient and cheerful adults."

Some of the words listed above, if not all of them, are words that designers use in describing physical settings with the understanding that the social environment can be modified by strong "messages" from the physical setting. Some of the parents' "social" answers reflected this awareness by, for example, writing "warm, nonhostile accepting--pleasant physical surroundings." Implied in the parents' positive attitude toward the Yard is the idea that they see the Yard as supportive of the values expressed.

Other parents, however, are more like teacher Q, discussed earlier, as having the attitude that the classroom (and by inference the classroom teacher) is the most important element in the learning environment. These parents stressed, or mentioned, such classroom oriented ideas as simple, clear rules, firmness, clear goals, a wide selection of topics, structured, upbeat happy classroom, and finally, as was perhaps best explicated by one parent, "A structured, largely traditional classroom situation, supplemented by free,

though supervised, and enriched play time." These ideas were expressed by a small minority--6 of 79 parents.

A third group attempted to bridge these two groups of parents by referring to a balance of organized formalized and free (informal) activities, or of socializing and basic skills, or of work and play (6 parents).

References to the physical environment complement the majority of references to the social environment. Eleven parents wrote that they thought Washington School was a good example of the ideal school environment. A few referred to specific elements like pond, forest, lake, innovative structures, "nooks and crannies" and grass, most of which exist by definition on the Yard. Many of the parents referred to qualities, like variety (11 parents), natural (5), stimulating (3), open (2), changing (2), diverse (2), quiet (2), fresh, clean, adventurous, earthy, alive, country-like, healthy, growing, challenging, positive, nurturing and having surprises (a total of 39 parents). One parent may have summarized this point of view by writing "One which presents as much as possible of what is to be learned close at hand." Others reflected the point of view by writing "lots of outdoor contact," and "a Yard to hold interest."

There were no overt criticisms of the Yard, but they might have been implied by four parents who referred to fresh, clean, safe and organized environments as the best for learning. It may be that some felt that such values are not adequately reflected in

the Yard. Finally, there were several who wanted an environment balancing structure and randomness with indoors and outdoors.

To conclude this section, the following "comments" offered by parents at the end of the questionnaire reflect their basic biases regarding the role of environment in education. The broadest group of parents seem intuitively or at least emotionally but unreasonedly approving:

> I think the Yard is an improvement and I know that Marlena and Stacy have a special feeling toward school because of it. I hope that it continues.

A small minority have a firmly based, well thought-out affinity for the concepts represented by WEY. The following was a proto-typical response:

> * (1) Environmental education can be used as a core subject for learning processes: English, math, scientific inquiry, group processes (cooperation, allocating responsibility, etc.) (2) Environmental education subject matter is also important for its own sake because of the concepts: Adaptation, energy and nutrient cycles, interdependence. fragility of ecosystems--all 21st century survival requirements. (3) Learning is most fun and most permanent when it is play: self-motivated, self-directed, with its own special place and time and special rules, and without anything heavy hanging over your head in case you blow it. It doesn't have to be competitive. It can be cooperative. (4) Not all children can handle that kind of freedom. Those who can handle it should have it. Those who can't handle it might be able to learn how to handle it (how to learn) in the yard, where a certain amount of motivation is built in. Those who can't learn how to handle it can go to a school with buildings and paved dirt and the rest of the normal routine (or take part in a different experiment). (5) AFTERTHOUGHT to No. 3 ABOVE: Play is the means for children to learn the basic skills they will need in adulthood. Hunter-gatherer children play with bows and arrows. Urban children play with a lot of dangerous machinery. But in the yard urban children can play-learn with the ecological aspect of reality, which is more important than the steel and concrete aspect (people can live without __steel and concrete __ an ecosystem--check one:)

Another small minority have expressed very negative feelings toward the Yard, based on values that are very different from the mainstream of the Washington community and that conflict with those of the second group, just quoted. The following comment was the strongest of all received:

> * 1) The yard is totally unnecessary with one of the biggest regional park systems in the country at our back door--O.K. for an inner city school where there are no parks.
> 2) i.e., picking up "litter"--"litter count"--I would rather see children learn to pick up litter on the sidewalks of the city, etc.
> 3) I wonder how many of the volunteers on the project came from homes where grass, etc. is not cared for? I would like to see people have more self-respect for their <u>own private</u> environment before taking time to make another environment.
> 4) I feel too much emphasis has been put on the yard with resulting dissatisfaction among teachers, parents, etc. There has been <u>no</u> impact on my children except with respect to getting their shoes wet and watching other children "fool" around the pond.
> 5) Often drive by on weekends--not used at all--as far as I have observed. Federal funds could have been used to put more aides in the classroom.
> Thanks for the opportunity to say my piece. I. L.
> P. S.: Husband concurs 100%.

WASHINGTON ENVIRONMENTAL YARD, 1976 -- the Creek and Natural Resource Area, with the school in the background

SUMMARY CONCLUSIONS TO PART III

Over 200 environmental curriculuar activities focused on the use of eleven Enviornmental Learning Stations (ELS), engaging all children at least once and many children regularly, across a range of involvement from 1 to 24 specific activities in the course of the year.

The results of five different exercises indicate that the children interact with all elements of the Yard. According to the student maps the aquatic system clearly had the greatest impact on the users, with the gymnastics equipment areas close behind, and with animals, vegetation, the structures and ball play also popular, but less so. The mix of element-types indicates a healthy balanced response between the organic natural systems and the man-made built-in systems of the Yard.

The student questionnaire backed-up the popularity of the ponds. Thirty percent of the children said they liked them most and mentioned eleven different activities occuring there. The traditional equipment area also had high popularity. On the latter, activity is exclusively motor-orientated in contrast to the aquatic system where a wide range of active and passive relationships are supported. Because the ponds area is a living system of plants and animals, it is able to accommodate more restful, contemplative activities, incorporating observation, social cooperation and discourse--in effect a developmental situation that cannot be accommodated by a hard, unchanging abiotic setting such as play

equipment. In equipment play children learn to conquer the environment in achieving personal mastery over it; in a predominately natural setting, highlighted by aquatic elements, children develop a balanced interactive mutuality between themselves and their surroundings. The contrast is one of domination versus integration. Our conclusion is that a diversity of relationships and settings are important for the healthy development of the child, and educatively speaking, the ultimate health of both human and non-human environments. The questionnaire indicated that the large majority of children valued the Yard positively, as an organizing, constructive environment, where individuals can find enjoyable things to do. Less than 5% of children responded negatively to the Yard at a personal level, although about 8% mentioned negative aspects of the setting itself: messy ponds, litter and antisocial behavior. The overwhelming majority of students expressed a positive relationship to the Yard in their response to a broad range of stimulii. To put these figures in perspective, a comparative sample of subjects should be studied, at a school with a completely asphalted yard, to find out the percentage of dissatisfied users.

The 'environmental alphabet' study reinforced the above conclusion. "Quiet" was the most popular feeling expressed about the Yard. A correlation of this effective relationship is postulated with the highest frequency nouns mentioned in the alphabet: dirt, water, kids, animals and vegetation.

The fourth-grade responses to the Yard, particularly for boys, indicate a tapering off of involvement in natural resources and in its place a developmental movement to more socially orientated activity taking place on the environment, rather than in it. Declining interest of 4th grade boys in the dirt and water areas of the Yard may stem from a decreasing ability of those areas of the Yard to stimulate older children adequately. It is hypothesized that this rapid decrease in popularity is due to three factors: 1) lack of deeper understanding of the diverse elements in the aquatic system and their potential for play, 2) insufficient space on the site to create an aquatic and natural system large enough to keep exploratory, adventure play happening indefinitely (the area covers only 1/2 acre, or 1/3 of the site), and 3) an increasing interest in specifically social play as a part of the normal maturation of the child.

Although it was not specifically focused on, there are clear indications of learning taking place on the Yard. It is expressed by the words used in the Environmental Alphabet, by ideas expressed in the taped interviews, and in the logged activities of the children. Conclusions in this area must be tentative because quantitative analysis of the extent and kinds of learning that occur on the Yard is extremely difficult. Thus far we know of no method of testing for learning that occurs on the Yard as distinct from the classroom or home. It is our hope to develop a method for doing this as a primary objective of future research.

In formulating this report more effort has so far been invested in interpreting results related to children, this is because numerically and philosophically they have precedence over related teacher and parent responses. Data from the latter two groups have, however, been instructive and are open to yet further illumination.

Main conclusions at this point are; a) that length of tenure and grade level taught do not seem to correlate with degree of involvement, b) that teachers' ideas about their professional role appear related to their concepts about the range of circumstances, and places in which learning can happen. One thing that the teaching staff agreed on very clearly was that there was far less trouble-making and fighting on WEY, compared to its unreconstructed condition of five years ago--or compared to some teachers previous experience of asphalted yards of other schools in Berkeley.

The parents' response to the Yard was found to be overwhelmingly positive, yet expressed mostly in an abstract, intuitive, qualitative or general fashion using words like "beauty", "growth", "exploration", "variety". A small minority of parents seemed to fully grasp the more operational role of the Yard as an educative tool related to their child's intellectual and emotional development. Apart from a small dissenting group, the presence of natural resources was almost universally praised, with the aquatic elements receiving most support together with other "green living things". The

question left hanging is whether such community support for a radically different outdoor school environment is particular to the Washington neighborhood. Is it true of other Berkeley or East Bay communities, or in other places in the country? It would be interesting to know whether support for the Yard is a reflection of the more general alternative life-style values' held by many who live in the central Berkeley neighborhood surrounding Washington School. One thing is clear, the parents have helped create more or less what they asked for in the 1971 'Parent Input Survey'. At that time the vast majority wanted a diversified range of radical change to occur. Removal of asphalt and the creation of a living space were particularly emphasized. Now that this has happened, a largely new generation of parents are generally happy with the result.

Part Four: The Methods Integral to the Purposes of Project WEY

SUMMARY OF RESEARCH METHODS

In the preceding section the process for establishing why an Environmental Yard is necessary to E.E. was described, emphasizing the kinds of information derived and a preliminary interpretation. In this section an analysis of the success or failure of the methods will be made, concluding with the presentation of a new one.

The methods used in creating activities for children and the cards used as a curricular material are described in appendices A and B. Specific questionnaires compiled for students, staff, parents, and PEET staff are contained in appendices K, N and O respectively. The conventional methods used for compiling questionnaires are generally known and are thus not detailed. The two mapping exercises are described in appendices J and M.

Levels of Methodological Focus

The methods to be focused on here are those used by PEET to facilitate the entire project operation. To our knowledge this is the first E.E. project at the K-4 level attempting to introduce staff and students to the resources available on their school's playground and to encourage its use as a learning resource comparable to the classroom.

PEET had to focus on maintaining the following five elements during the project: 1) the physical site, while staff and students groped with learning about it; and 2) directing the staff in their varying degrees of openness to the Yard as an educational tool. PEET also

had to 3) work with the children, to experiment with various learning possibilities, so that they could be formalized into curricular projects. This entailed PEET working not only with children, but 4) on its own, developing curricular materials. Finally 5), PEET had to interact with the broader community of parents, University, school district and interested outsiders.

Because of the unique nature of the project, i.e., its operation on five levels in a novel program--the group's organization was necessarily left loose, providing for flexibility and adaptation to indeterminate realities. However, the looseness also implied some necessary lack of focus on specific priorities. At times this led logically to a confusing welter of partially completed, somewhat neglected enterprises.

Having to look constantly over our shoulders to see not only what we were doing, but how and why we were doing it was disruptive to our working with teachers and the task of curriculum development. Teachers could not straight-forwardly teach, they had to document and comment on it; have it assessed and recycled again. A certain amount of "red tape" was thrust between the teachers and their teaching, which was annoying and somewhat resisted. However, having to constantly turn around and study the situation, the Team and staff were forced to do an amount of introspective evaluation that might not have occurred otherwise. To the extent that it did, the first goal of learning about the physical environment and the teaching process was facilitated.

Future Operational Method: A Proposal

The simple solution to the problem would have been to proceed one step at a time, rather than try to move all parts of a massive, awkward whole simultaneously. A sequential process would have had outdoor resource people spend most of the year (to cover all seasons) engaged in the exploration and development of curricular activities. The activities generated could then have been fed to the four PEET teachers, who have organized them into cards. At the same time, documentation would have indicated the kinds of E.E. activities children engage in independently, during their free recess time. These activities could have been compared to the formal activities, and combined with them, so that the E.E. activities related more directly to the children's freely-chosen play. Finally, while these two activities were going on, an inventory of all resources on the Yard could have been made so that as much as possible could have been incorporated into the curriculum.

During the first summer these E.E. curricular activities would be made into integrated curricular units, bringing the lesson, the children's activities, and the site together in one whole integrated unit. These units would be "packaged" together with the Yard inventory and explanatory material for specific, pre-selected teachers particularly interested in field-testing them.

A second year could be used to devise and field test methods of training staff in E.E. teaching, leading at the end of the year to specific curricula to develop the staff's values toward and knowledge of both the E.E. movement in general and the Yard in particular.

The third and final year would go toward the actual training of teachers at the school, including the involvement of all layers in the internal school community. This would initially require keeping community dissenters away from the teachers, and then quickly following up with an active program to get the support of the community, especially the local, state and federal educational systems.

Operational Lessons Learned During the Pilot Program

The ideal presented above could not have been described a year ago because no one knew then how to explore outdoor curricular activities or how to interpret them into curricular units. We did not know how to observe children's free play, how to "test" the Yard impact in questionnaires, maps and word-eliciting tests and how to transform such data into curricular units. We had only slight expertise in engaging teachers in environmental awareness and understanding; and limited experience of how to move a community toward accepting environmentally desirable goals.

No one knew how to do these things because no one categorically knew what the objections, problems or tangential discoveries would be. With the 1975-76 project behind us, we now know some approaches to exploring the curricular potential of a school site area, both by experimenting with groups of children and by observing children in independent play. We also know how to transform these activities into integrated curricular units. We are beginning to know how to train teachers in environmental awareness and understanding. We have yet to explore the education of those parents and others who do not share our perspective on E.E., although we have begun to isolate and understand their objections.

The real success of the project was in clarifying the work that needs to be done, the methods that need to be employed in doing it and a possible plan to orchestrate all the parts. It also tells us that E.E. as it is conceived of at WEY is effective because it uses a shared space relevant to human needs as a means for contacting the physical, intellectual and emotional dimensions of students, staff and parents. The process focuses awareness and allows values to surface so that they can be dealt with openly. The following is a detailed outline of recommended further work leading from the advances in understanding we have achieved. In effect it represents the hypothesis stemming from the conclusions of this past year's project.

A. Detailed Proposed Operational Procedure

1. Conduct a detailed inventory of the physical site, updating it during each season (see Appendix I for sample).

2. Give children tools necessary for observing, measuring, and recording phenomena outdoors; give them tools for putting power--wind, heat, flowing water--to work; give them tools for making the site respond to their stewardship--composting, gardening, etc. (See Appendix A for sample list)

3. Lead children in the use of these tools in small groups, recording use and ideas of potential uses that come to mind (of potential uses) that are not explored. (Appendix A)

4. During the children's free time outdoors, make tracking and time lapse observations of children to see where they go and in what numbers they attend specific areas. (See Appendix Q)

5. At the same time observe at close hand with camera and notebook to document detailed interactions of children and environment. (See Appendix R)

6. When #4 and #5 are well established, take tape recorder out to site and interview children regarding their environmental interactions and perceptions in play. (See Appendix __)

B. Transformation of Activities to Curricula

1. From 1.4, 5, 6, above, prepare map showing where children play, and group areas in terms of the play that occurs there.

2. From 1.2, 3, above, prepare map showing areas that children and leaders find most conducive to E.E. activities. (See sample, page 16)

3. Overlay maps 2.1 and 2.2 to establish primary Environmental Learning Stations (ELS)--those areas of the Yard where most children play and where E.E. activities are most popular. (See sample, page 41)

4. Consult Environmental Inventory to find out what specific elements are located at each primary ELS.

5. For each ELS construct a matrix with the elements from 2.4 on the vertical axis and the DIAC/BGY/ECS/ La H M S So O/ categories on the horizontal axis. (See Appendix B)

6. Using observations from 1.2, 3, 5, 6, construct activities, filling in as much of the matrix as possible.

7. Specifically identify and incorporate basic skills into all activities to ensure an interdisciplinary curricular framework.

Note: During pilot research, an inventory was not made until cards had already been developed. Thus the method "hypothesized" here was not tested. However, each step was conducted somewhere along the line, and thus we are able to provide samples in the appendices. It should be kept in mind that ideally each teacher would make his or her "seed cards", based on an intimate understanding of the Yard, the children's play, and the lessons she or he wishes to teach. Normally experimental replicability would not be a factor, and were steps 2.1, 2, 3, 4, taken systematically and thoroughly, there would be no need for massive questionnaire and map tests.

C. Implementation of "Seed Cards"--Staff Training

1. Entry Sessions (Appendix D)
2. Brainstorming Sessions (Appendix E)
3. Activities Log (Appendix A)
4. Staff Questionnaire (Appendix O)

Last year these four exercises provided a channel to integrate E.E. concepts and interdisciplinary aspects of E.E. direction--both indoor and outdoor. They also indicated staff attitudes toward E.E., and enabled PEET to zero in on specific attitudes. Methods for inculcating new values and for changing old ones must still be refined. These exercises also provided a forum for discussing other aspects of the program, more directly related to logistical and other technical problems, e.g., allocation of garden plots, tools, etc.

D. Education of the Broader Community

Following the above, in the long-term an intellectual and administrative climate will have to be developed in which teachers could freely teach, without having to spend so much time accounting for themselves in other legislated programs. To implement this diversion will eventually necessitate changing the values of the entire school district, which in turn, will necessitate changing the values of State and Federal agencies who currently emphasize the insertion of a layer of hardware between teacher and students, rather than taking advantage of that which is commonplace around

them.

Techniques for doing this are being explored via value-confrontation experiences here at WEY; by a literature search; and most importantly, by sharing our experiences face to face with others in similar situations.

APPENDICES

Contents

A Environmental Education Documentation ---------- 70

B Environmental Curricular Activities Conducted on WEY 1975-1976 -- 92

C Seed Cards ---------- 96

D Entry Sessions ----------117

E Brainstorming Sessions ---------- 122

F Pond Closure ---------- 128

G WEY Yardfest ---------- 135

H Yard Inventory ---------- 138

I Student Maps ---------- 141

J Student Questionnaire ---------- 146

K Environmental Alphabet ---------- 161

L Transcription of Taped Interviews with Students ---------- 170

M Environmental Yard Interpersonal Assessment ---------- 181

N Fourth Grade Map Exercise ---------- 183

O Staff Questionnaire ---------- 189

P Parent Questionnaire ---------- 211

Q PEET Staff Questionnaire ---------- 239

R Methods of Observing Children ---------- 241

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APPENDIX A

Environmental Education Documentation

1. Explanation of Contents

2. PEET Documentation Form

3. Five Sample Pages from Student Log

4. Two Sample Pages From Log Taken From Student Journals

5. Two Sample Pages From Log Taken From Student Comments Regarding a Day Spent on WEY

6. A Copy of "Environmental Yard News"

The following "Pink Sheet", as it was called, was the project's formal documentation form. It has three parts so that it can be used as a communications tool between two or three staff people. The letters at the upper right of page coincide with symbols used on the "Seed Cards" (see Appendix C).

The pink sheet was only moderately successful as teachers and PEET staff found it took a considerable time commitment to use the forms. Verbal communication was much quicker and more immediate in its effect and thus often surpassed the documentation form in use.

Completed pink sheets were placed in a box and periodically typed up as a "Student Log". Five sample pages of the log are included in this appendix.

Some activities carried on through the year and were logged by individual students in journals. A sample from one classroom is included.

Two other supplements included are excerpts from one teacher's children who spent an entire day on the school yard engaging in "class work", and a copy of the "Environmental Yard News".

Internal/External PEET DOCUMENTATION Activity #_____ Sheet #_____

Date:_____ Time:_____

From:_____ To:_____

Circle appropriate characteristics:

B G Y D I A C R M L S So H E C S

Children:

1._____ 6._____

2._____ 7._____

3._____ 8._____

4._____ 9._____

5._____ 10._____

Activity Goals/ Description:

From:_____ To:_____

Date:_____ Time:_____

Activity: Accomplished: Unfinished:
Terminated: Altered: Ongoing:

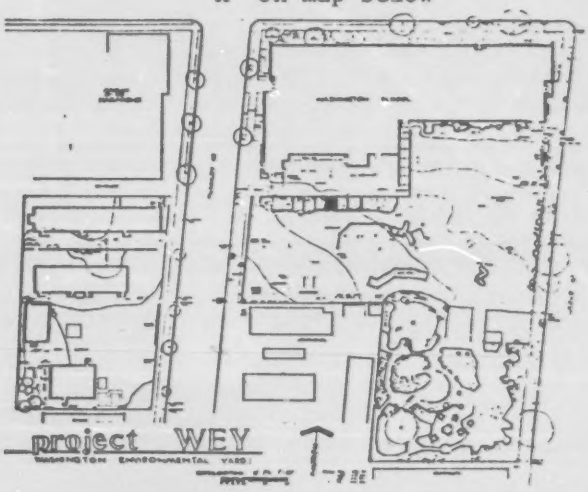
B G Y D I A C R M L S So H E C S

Describe/Discuss Activity done:

LEARNING STATION LOCATION

Indoors: Classroom #___
Other Classroom _____
Your name for Station_____
Media Ctr___Other_____

Outdoors: Your name for Station_____
"X" on map below



Duration:
Resources Used:
Resources Needed:
Comment/Recommendations for follow-through, spin-offs, etc.:

Documentator:

From:_____ To:_____

Date:_____ Time:_____

B G Y D I A C R M L S So H E C S

ACTIVITY CONTINUED:

When:

Where:

How:

What Resources:

ACTIVITY DISCONTINUED:

Why:

Comments/Recommendations:

Continue on additional sheets if necessary, don't use backs

12/10&11 From Tom and Ellen, to Jan Duckart, on the pond and living things, whole class (k's) on loth discussed location of pond, 2. what is in the pond area, 3. Dif. between living/non-liming things, 4. intro. living organisms concept. 5. went to pond, each child drew "living things" they observed. Wed.,11th, 6. reviewed what are living things, 7. shared drawing w. class.

12/11 Jerry to Staff: Jeff (207), Christina (208), Cris (204), Krystal (206), Jessica (102), G,il (200), Dana (108), Molly (112), Sarah (110), David (186), did the garbage pick-up thing

12/12 Litter arade: Lark (106), Vincent (102), David (108), Vonda (208), Gillian (204), Jonathan (110), Jimmy (207), Kenny (200).

12/15 Ellen and Tom to Juanita; Tom did weathervane study with Chris D. looking at pictures of weather vanes on various buildings of the past, what they are decorated with, etc. 2. cont. working on individual weathervanes, 3. Chris did a good job today. Ellen, with Mayumi, Krystal, Ramona, Monique, Karen, Krystal, and Connie did minipark project, 2. fertilized trees, cutting grass, pruning trees, 3. pulling fallen logs and other garbage out of the pond. NEEDED: A long pole with hook. Kids need to wear grubby clothes on Mondays.

12/15 Ellen and Jerry to Staff: Trent (112), Kirsten (110), Christa (200), Marga et (102), Andres (204), John (202), Eric (108), Sammy (208). did litter parade

12/15 Ellen to Shulte: Lisa L. and Julius have been working of an aquaria and calss came down to observe, discussed the process of making one, 2. what plants and animals were in them, and discussed that snails had babies. Class is going of a field trip to Blake estate to look at the ponds. Schultee commented that the kids noted to duckweed, elodea, etc. that the kids had pointed out to them by ellen.

12/15 Tom to Bob and Whit: 205 and 207 came out one class at a time and one by one harvested the radishes from their respective plots. It was a beautiful, memorable occasion. Pictures taken by Jeff, Herb, and Whitney.

12/15 Report by Phyllis Goldston: Continuation of previously reported Environmental Activities--Emphsis on Five Senses.

Small Group Work

There are three different small groups which report to whole class in various ways.

1. Planting group: Tom Armour has worked practically daily with this group for over a month. This group has a book recordeng their activities. They also report daily to the class. This started as an offshoot of Haloween with planting pumpkin seeds. I have the children pant the same seeds in the room that tom has them plant in the greenhouse and outside for comparison. Pumpkin seeds grew in the room and not outside. Some were then moved to the green house. The two kindergarden boys who grew the inside seeds then joined the four children (1 kindergarten, 3 first graders) who were already working with Tom. This group tried planting cotton seeds that were picked out of the cotton brought in by a child. (This will be reported under whole class activities). The cotton in the room did not grow, but the cotton planted in the greenhouse grew.

2. Group of children (4 1st graders) using yard to develop awareness with emphasis on five senses. This group goes out about once a week with me and reports to the class b taping their report. This work will be finished before vacation next week. Since the last time I reported, these children have been using objects on the yard and using descriptive words in relation to five ~~senses. Example: object--pond~~
Touch
Web
~~cold~~

senses. Example: object--pond

Touch	Sight	Smell	Sound
wet	dirty	dirty	popping (bubbles)
cold	gushy	stinky	sizzling
freezing	greesy	fresh	
gushy	blue		(they realized they couldn't taste the pond)
	green		
	messy		
	muddy		

3. Group of four kindergarten children ging out with Frances Pasion (student teacher). Her report is attached to this report. This group will finish by vacation too.

"Use of The Yard" by Frances Pasion

With a group of 4 K's, I have begun a weekly exploration of the Env. Yard emphasizing use of the five senses. We go out for about a 15-20 min. period of time and orally report our goings before the next class. The first time, we walked around the Yard and tried to list everything we saw. The first attempt came up with only very general items--weeds, trees, wheels, (on a bar)--however, after only a few examples of more detailed descriptions--flowers, leaves, clouds--the kids came up with many more various offerings--grass, people, stumps, ladder, sawdust, scarecrow, etc.--they took a closer look.

The second time we chose a certain spot on the Yard, closed our eyes, listened carefully, then listed as many different sounds as we had heard, i.e. voices, cars, the wind, trees, birds. Then we moved to a dsitant spot on the asphalt and again listened and listed sounds--men pounding, fence clanging, feet stamping, and talked about the different sounds from the different places. We ended by walking on some hay and dired grass mear the compost box and discussing whether we were making the hay and grass rustle or whether the hay was noisy by itself, without the help of our feet.

The third time we each went on a "trust walk" through the environmental yard and then, with our eyes still shut, tried to determine where we were at end of the walk. We also tried to describe how we made our guesses-one child guessed by feel (walking over something), another by smell. All were by using other senses besides sight.

The fourth time we will choose different things in the Yard and feel them. We'll compare them with each other and talk about how they're the same or different. The fifth time we'll smell different things and discuss them. During either the 4th or 5th session I'll discuss taste with them and explain why we probalby won't taste things from the Yard, however we can guess how certain things may taste. The sixth and last time I'll be able to take them out, wee'll each choose various things on the Yard and describe them to each other using the five senses--this thing smells like--it feels ...,etc.--and we'll try to guess what each child is describing.

Whole Class Work

After our work on wool (Mrs. Mikkleson, a parent, taught the children to card wool, and then she spun it with a spindle, a child brought in some cotton picked oh a trip to Fresno. We removed some of the seeds for planting. Mrs. Mikkleson returned and spun cotton for us using a spinning wheel this time. She also had an unusual type of spinning machine from India. The cotton and wool threaded was compared with linen thread and flax and albino flax samples were shown. We saw a film on the growing and spinning of cotton in Africa which was a good comparison with the mechanized process used in this country. The week of Dec. 8th the children could choose to make yarn pictures during activity hour, (after vacation I'll be going off on another aspect, so attached is schematic drawing of what we have been doing.)

Cotton-Wool Lessons ~~XXXXXXXXXXXXXXXX~~

indoor lesson feel it bag and the five senses (whole class)

↓

lesson on wool using wool from whole sheep, how it felt, smelled, etc. (whole class).

↓

learned how to card and spin wool (whole class)

↓

read book about lambs and sheep

↓

got cotton → took seeds out and plantdd

↓

spun cotton

↓

compared threads (wool, cotton, linen)

↓

more on growing and spinning cotton

↓

yarn pictures

Using Five Senses

small group outside awareness using 5 senses

↓

list what aware of at certain spot on Yard

↓

classified thing mentioned on above list

↓

found out what things mentioned were common to more than one sense

↓

objects on Yard-- children listed descriptive words under each sense.

Outdoors

small group outside

↓

listed what saw on Yard

↓

listed sounds heard

↓

made sounds using feet

↓

trust walk determened where they were and how they knew it

↓

feel objects for similarities and differences

↓

describe objeet in terms o of 5 senses

12/16 Jerry to Staff: , Scott (102), Renee (112), Allan (202), Yolanda (210) Deann (204), Sheila (200), Mike (110), Eric (108), Monica (106) did Trash Pick-up.

12/17 Jerry to Staff: Katie (204), Franklin (108), Rebecca (110), Sarah (208), Cara (102), aBecky (205) and Peter (207) did pick-up with interesting discussion on seagulls visiting the Yard for "their" lunch. Decided to save some "choice" litter and to display it after christmas and use it in recycled art.

12/18 Tom to Peet: gardening classes, 102, 202, 204, 205, 207, 210 took part in transporting compost from bin to their resp. garden plonts and covering soil and weeds with compost to feed plants and conserve moisture during vacation. The compost #1 has gone full circle. Herb took pictures.

12/19 12 children from 102 decorated ~~and~~ redwoods with strings of pop corn hoping the birds would feed on it during the holidays.

12/19 K's from rm. 104 continued water study with Tom and Joyce. 1. looked at a jar of pond water (from last week), 2. talked about pond, 3. discussed who uses it, 4. label pond and tap water samples (polluted and clean) 5. Reviewed uses of water (from chart), look at jars--which would you like to swim in, play in, take a bath in, which would be better for animals, plants, why? 6. where have you seen "dirty" water? What kind of water do most living things need?

From Ellen to Mel: undated note stating that Traci, Taro, and Iris to water garden, but that much needed be done with weeding and mulching, question about what to do in the future with the garden.

undated Ellen and Jerry to Staff, Carl (112), Idon (106), Allyssa (204), Jane (108), Kai (102), Ronny (207), Ricky (200), Nancy ( ), Juanicia ( ), Yolanda (210) and Derek (206) picked up 2lbs of paper, 1 lb of plastic, and 3 lbs of miscellaneous trash

undated Jerry to staff, Mary (207), Jason (204), Carlos (100), Jeff (108), Eric (200), Sophia (106), Kristen (102), Jeremy (206), Ashley (205) picked up 3 lbs paper, 1 lb,plastic, 9 lbs other plus 65 potato chip bags. Weight was so high because of 2 rubber pipes found of yard. Litter parade

12/7 Jerry to staff: Marty (206), Peter (204), Gabriel (205), Max (207), Chris (112), Jason (108), Larry (200), Eva (110), Aaron (102) on Litter Parade found 2 lbs paper, 1 lb. plastic, 2 lbs other

12/8 Jerry to Staff: Ricky (102), Michele (205), Jim (207), Collin (110), Jeff (108), Amanda (204), Joe (200), Jeff (106) did litter parade with 1o2, 202, 206, 210 of field trip. Found 2 lbs paper, 1 lb. plastic, 1 lb, other. Fun day, Jerry noted, as wood chips arrived and the kids watched the truck d dump them.

12/15 Ellen and Tom to Mel: Ellen took Io, Danielle, Iris, and Traci and worked on minipark, fertilizing trees, clipping grass, raking, and pruning trees. Tom took Daniel, Bev, Garrett, Eric, Taro, Brendan to make a weather vanes. They 1. looked at pictures of weather vanes on barious buildings of the past. What are they decorated with, etc. 2. continued working on individual weather vanes, 3. Everyone was working and involved today Mel noted that class is sharing in activity.

1/5/76 Ellen and Jerry to Staff: Tina (102), Cherisse (200), Donovan (206) Eric W. (210), Wesley (204), Ricky (112), Jeffry (207), Theresa (110), Miko (205), and Jeff (108) did litter parade and got 5 lbs paper, 2 lbs plastic and tinfoil, and 6 lbs of other.

1/7/ Cox showed films of pollution: Alone in the Midst of the Land and Ishi. Discussed our relationship to the earth--Are we killing the earth? Related to garbage brigade, littering, paper waste, etc. in classroom. Diary recording. Area included B G Y DIAC RMLS So H But not ECS.

1/7 Cox, ongoing project with each child having white mice on desks making observations, caring for them, etc. Diary Recording.

1/8 Cox, ongoing, trip to Oakland Museum to see: California natural history, California human history, Man and his Art, and then the kids made murals. Project included BGY DIAC RMLSSoH and ECS

1/8 Cox, ongoing, discussion of aquaria, each child cought a fish and is observing aquaria life. Diary keeping. Discussion and drawing of scallop shells (rubbings). Activity is: G DIAC RLSo

1/9 Cox, activity accomplished, Rain: 1. read some rain poetry,= from Time for Poetry and Miracles, 2. took a walk in the rain on playground, 3. wrote some poetry.

1/12/76
Ellen to Staff: Erica (112), Shannon (102), Jonathan (110), Kenny (108) ~~1/13/76~~ Yolanda (210) and Chris (106) did litter parade

1/13/76 Ellen and Jerry to Staff: Craig (204), Ricky (112), James (108) Ravi (110), Jeff (106), Meg (102), Sammy (206), Amanda (200) did litter parade and collected 3lbs paper, 2½ lbs plastic and tin, 5 lbs other. Today's big find: orange peels

1/13/76 Ellen to Staff re. litter parade. Jean Huston's class has been very active in litter parade but have not been eating outside. They have decided as a group that they will not letter and therefore they are now going to eat outside.

1/14/76 from Manny Funks class, Maryann, Jay, Greg, and another kid are moving wood chips onto the paths in the natural resource area.

1/14/76 from Jerry to staff: Keiko (108), Kristen (200), Tisa (110), carla (206), Niko (204), Robert (210), Brenden (112) litter parade collected 2½ lbs. paper, 1½ plastic, 1½ other.

1/16/76 from jerry to staff: Laura (108), Juanita (112), Iwanisha (110) Eric (200), Lizzy (204), Tashun (206), Teresa (106), Katie (102), Bobb (210) Russel (208), Linus (212) did litter parade, found 1½ lbs. paper, ½ lb plastic, 3½ lbs. other. Lots of orange peels.

1/16/76 Jerry to staff: free activity. 4-5 girls burried a mosquito fish constructed a grave for it by the pond--using a stick bound by a piece of grass for a cross. Decorated the grave with flowers, dandelions, pine cone, redwood branch, pine branch, sycamore chips, stones, etc.... set the boundaries or the grave. Far out! Herb took pictures! Turned out to be a baby chick and perhaps a hen from Cox's class. No feedback yet about all that.

1/16/76 Jerry to staff: lots of kids grabbed during their recess periods--they volunteered to help! Sycamore chip relocation/spreading. Some of the help: Chris (112), Jimmy (207), Peter (205), Max (205), Eric (220), Mary (205), David (208). The chips have been compacted in the big pile causing almost a new compost--lots of steam--very hot--the kids put their hands in to feel the heat and amoun66____? we had a large gathering to touch the "heat!" Herb took pictures.

1/18/76 Jeff to Peet: Matt Owens, Chris D., Russel, Jeff, Erric, Eric, Shawna, Mary Ann-- were loading, transporting, dumping and spreading wood chips onto the pathways of the Nat. Res. Area. Both boys and girls carried out these tasks with assistance from Ellen and Jeff. Children provided the "horsepower" as a wagon loaded with two full cans of woodchips was pulled to its final dumping location. Chris D. offered the most time to this morning's task working with me from 9:45-11:30 (preferred it to math class) This work activity could be integrated with math, physical sciences, which deal with volume, ~~with~~ weight, measurements, etc... to strengthen relationship of indoor-outdoor learning exercises. (Must have been 1/19)

1/19/76 Ellen to Peet: Anthony (205), Selina (102), Andy (204), Myra (108), Molly (112), Jenal (208), Eric (212) collected litter parade--1½ lbs. paper, ½ lb. plastic, 1½ lbs other, 3½lbs total

/19/76 Don to Peet: Abe, Kai, Aaran, Andrew, Vincent asked for copies of the plan of the Yard to use to scheme ways in which they could ~~xxxxxxxxx~~ trap and catch girls. Next hour the girls also asked for them so they could devise escape routes. Will be interesting to see if they have used them and if so what kinds of geography got through to them by next week.

Don read 17 journals. Most of them mention Tom's rabbits, some mention gardening, and planting seeds, and all mention going out after a rain and "noticing differences." Many mention starting the aquaria, and putting snails and duckweed in them. Many mention making prints with vegetables, few mention the flower made of a balloon. The following is a quote of a sample of the journals.

Selina:

Oct. 13, 1975

Today I found a catapillar on the ground. He or she was a wigle worm. We put it in the wet dirt. Mine had a yellow stripe on it's back.

Oct. 15, 1975

Yesterday Milly and I saw what we think are two snails mating. We are reading on it to see if they were really mating. And we are going to the Library.

Oct. 27, 1975

Tom brought two girl rabbits--one is gray and one is white and gray. Thats' the one I like the best. We are going to take good care of them so they will be healthy and good.

Oct. 30, 1975

Yesterday I helped make beds out of dirt and we made paths so we can walk in the garden and not step on the plants.

Nov. 6, 1975-planted-Oct. 30, 1975

We planted pea seeds, mustard, beets and cabbage. We are going to plant alfalfa soon because the rabbits are running out of food.

Nov. 18, 1975

A couple of days ago we started a assignaient (assignment). We counted the cinds of organisms and plants but they had to be more than one.

Dec. 5, 1975

Yesterday Milly and I turned the compost by ourself almost. It was 100° you could see the steam rise. Milly fliped some compost and bugs came out.

Dec. 12, 1975

After it rained last night....

1. soft wood, 2. blue sky, 3. windy, 4. wet bars, 5. no bees, 6. full pond, 7. puddles, 8. scattered leaves, 9. shiny snail paths, 10. droopy leaves and flowers, 11. muddy, 12. wet ground.

Sydney

Oct. 13, 1975

Today I went to school. I just started doing normal things when a whole lot of kids came in whith a frog. It was brown and some other colors. But the next day it was gone. But it was ok because it was a tree frog.

Oct 14, 1975

Today I felt good when , woke up. It was cold but I didn't care. I put on my hat to cover my hair. I put on my robe and felt a scare, but I didn't care! I did my duties. It was fun. I stood up and played w ith a toy gun. It was fun. I went to school and when I was done, I thought to myself: wasn't it fun. the end.

Oct. 15, 1975

Today me and Kai, Angela and some other people went out to the pond in our school. We cought little organisms like fish, tadpoles or water snails. We had abig fun because we're friends.

Oct. 16, 1975

Today I started my day by coming in and greeting my class mates and my teacher and today we got to eat outside. then I put the organisms out and cought some more. it wqs fun.

3-26-76-- Yesterday we went to San Pablo reservoir. There were three different places. A little creek, a pond, a wood land, and a meadow. In the pond were lots of bugs. I saw some daphnia! These poems are all about yesterday.....

When we went to San Pablo reservoir
The air smelled good.
The water was nice and cool.

Bugs fly, cows eat and I
liked to look in a little creek.
Over the hill and far away
is the place where little cows
play.

Vincent:
January 30-- We moved our garden plot to the enclosed area.
Feb 11, 1976-- On feb 5th it snowed. We went out side for a while. Then we had to come. When it was time to go home it was still snowing but it was raining too.
March 4-- A good place to plant the seeds is under the fence.
March 9 1976-- Table 5 put 43 daphnia in our aquarium.
March 10 1976-- We went out to plant some wildflower seeds and some other kinds of seeds. It was fun.

Today I lokked at a hydra. It was long and has five tentacles.

March 15, 1976-- Today we took five daphnia from our class and put them in a little round thing called a vial.
March 23, 1976-- I saw about 10 or 11 daphnia in our vial.
March 26, 1976-- The trees roots coje down from the tree into the dirt. Thees fall into the river. Snakes slide in the grass. The bull almost caught us on the other side of the bobwire.

Andrew:
Jan 30 1976-- We moved our plot to the enclosed area. The kids that worked on it said that it was hard. We did not get plants to grow in the first place.
Feb 11 1976-- On Feb 15 it snowed and it was cold. After school I went up to scott's house. We had snow fight. It was fun.
March 10, 1976-- Our class planted wildfrower seeds. I like seeing the progress of the growing.
March 10, 1976-- Hydra (picture in pencil of one)
March 15th 1976-- Today Brodirick and I put five daphnias in a vial. In the aquariums from tables one and two hade hydra and daphnias. The hydra ate the daphnias.
March 23, 1976-- All of ours lived and we got more around 25. I like getting more.
Fry March 26-- One day ago my class and I went to a pond that gave us our water. We went on a hike into the woods and across a meadow. We are going two more times.

Shannon
Jan. 30, 1976-- Today we moved our garden plots to the enclosed area.
Feb 11, 1976-- Yesterday we planted our golden bamboo in the yard.
Feb.11, 1976-- Last week it snowed it started at 12:00 and lasted till 3:40.
Feb 11, 1976-- Our class and other classes started saveing aliminimso we can recycle it.
March 9, 1976-- Today we put in table 4 46 daphnia in our aquarium #4. I feel good.

April 1, 1976: Historic moment! W Washington School class spent the whole day outside, mostly in the natural resource area. The following is the notes of the kids in the class. The first set of information is in response to the statement "This is what I plan to do today: (Remember the suggestions we made.)" The child's name precedes the list.

Molly
1. I am going to read with Danielle and to my self.
2. play with Traci and Danielle
3. do math
4. dig fire pit
5. EAT
6. sail boats
7. practice things like wrighting and times
8. draw

Brendan
1. I am going to make one of the fire pits.
2. I am going to read
3. I am going to write poems.
4. I am going to make some boats
5. I am brobily going to play soccer at reces.
6. I am going to eat some good food.

Rina
1. Rock fire pit
2. Poems

Jonathan
1. Today we ar haveving a wenr ros
2. Today we can haev fun

Sara
1. read
2. make doles cloes
3. play thet bots
4. play games
5. and do uetrthet.

Yolanda
1. play games
2. have some boat games
3. read a book
4. look at the pond and play at the pond
5. play in the sand or make a dam
6. play with your frend
7. play stor or play with your doll
8. bring math book.
9. play all day
10. or go fishing
11. or play with your best friend
12. or play with your boat or wach them go
13. or make some stuf for your boat and make your boat pretty and nice.

Eurydiee
1. cooking
2. library book
3. boats
4. look at the pond
5. get lunch
6. play whith my fenes
7. coler

Taro C.
1. I am going shoping to Day and I am going to sail boats and Do Poems.

Anthony
1. Work with Eric
2. Play
3. camide jobes
4. have fun
5. sale baots
6. do things
7. eat
8. rede
9. have a good day

Robert
1. I'm going to Make the rock fire pit
2. I'm going to do on po
3. I'm going to slou bot
4. I'm going to red

Derek
1. I am going to read. And I am going to sail boat and I am going to eat.

Celeste
1. Play and make things and mabey sale boats.

Ben
1. Play, read, poems, Math, Boats.

Awad
1. on the first seen I'm sailing a boat and haveing fun raseing other kids. 2. on this seen I'm roasting marsmallows and haveing my hot dog 3. we were going to the co-op to get some food. 4. on this seen I'm reeding a baseball book

Waro P.
1. I liked to sail my boats in the big pond. I tied a string to my three boats. 2. I liked to roast my hotdog over the fire and eat it. 3. I was palying cards with Garrett and we had fun! 4. I was hakeing a boat and it was fun!

Rina
1. We rosted marshmellows over the fire. it was fun and i liked it. 2. We ate smores they were good and fun. 3. I made lots of poems and Jhon came. 4. I rosted my hot Dog till it was well Done Then i ate it yom yum.

Xachi
1. I liked saling bouts it was fun. 2. the thing that I liked most was eating. 3. Reading is my favorite thang too do. 4. and last but lest is mack friends.

Danielle
1. We were roasting hot Dogs and the smoke would come in my face and make me cofe. 2. I would First Just wqlk around with my boat then I'd Run very Fast it looked very Funny and it was Fun. 3. I was very hurngry so Traci Gave me half an apple then we sherd a wonderFull Cholet Dounet. 4. We had sommores and Thay were very very very GOOD. you roast a marsh mellow Then you put it in between tow Gram crackers with some hershey Bar. MMMMMMMMMMMMMMM Crunch

Garrett
1. I like roasting the hotdogs and eating the hotdogs. 2. I was playing gin with Ben and I won and I like winning. 3. I made a boat with a silk sail and I sailed it down the river. 4. I liked playing socker and my team won.

Sara (April 2, 1976)
1. In one picture the grie is watching the firephte 2. they wrwe puting uot the Fire. 3. they are rhsting the hutdogs 4. The phund,

Jonathan
1. we ar haveing a weiner roast. 2. Iam sailing boats 3. we rldy basketball 4. We pldy secor

Martin
1. I liked the somores. 2. I liked the boats 3. I liked the marshmallows 4. I liked the hotdogs.

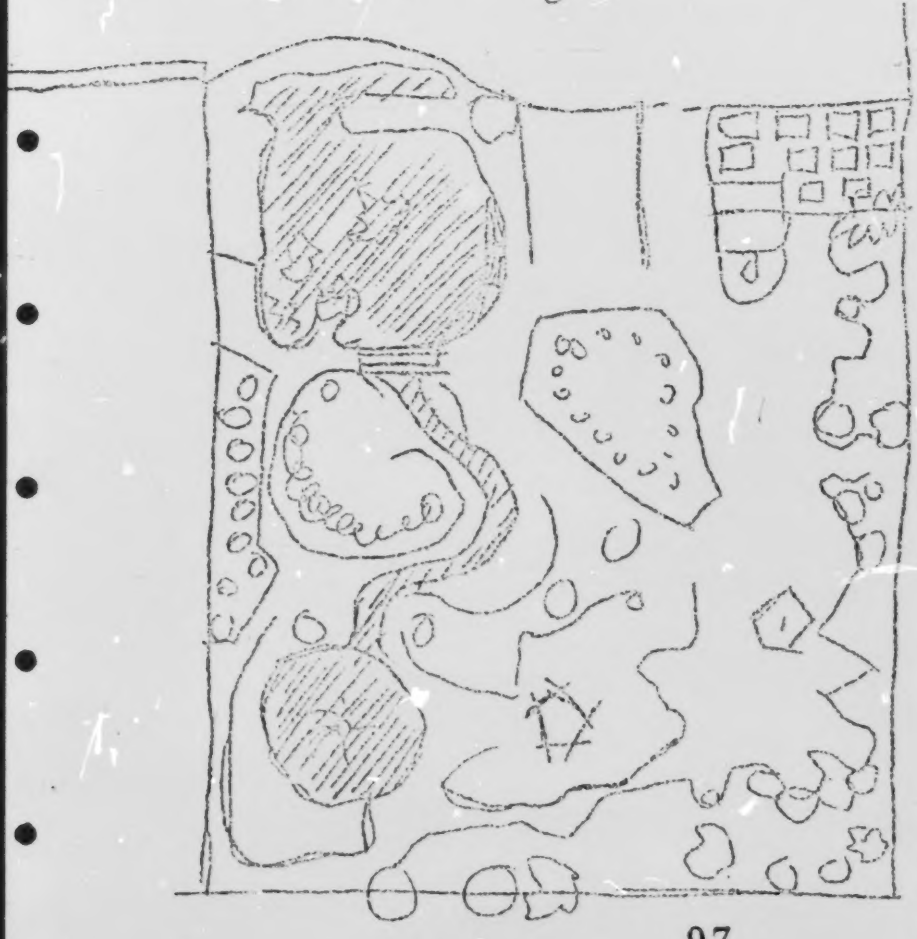
Joshua
1. It was very nice to roast the hot dogs. I almost burnt my hot dog. It was fun. 2. It was nice so nice to sail bouts down the stream once my boat almost got sunk and I had races. 3. It was so peaceful to be near the pine trees It was nice writing poems in the sunshine. 4. Near the pond It is so peaceful just siting near the pond looking at the little fishs go by.

Derek

The

Environmental Yard News

Spring edition



Andrew Scott

The Weather Page

by room 110

We Made Rain

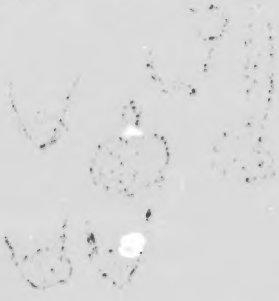
We made rain by putting a bowl of rice over a pot of steam. The steam went up like a cloud to the bottom of the bowl. There was hot water in the kettle. We saw drops of water on the bottom of the bowl. Then the rain came.

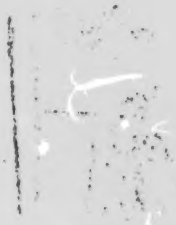
We Made Dew

We got a glass of water and put it in a saucer. We made the water green by putting in food coloring. We put ice in the water. We waited until water came on the outside of the glass, which was dew.

We Made Water Evaporate

We put $\frac{1}{2}$ cup of colored water in each of two cups. We put one cup under a light and the other cup we left plain. We left it a few days. The one under the light evaporated the most.

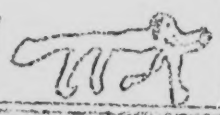




CHANGES

Before I could Not CLiMb a tree. I could Not read as Good as I can Now. Everything is changing In my Life. I AM Braver than I WAS Before. by Joshua

hanges In ME since kinergarten
Couldnt read as Good.
Cowldnt Spell as Good.
am older.
am taller,
am smarter.
am dirrerent.
am me. by Anthony



Changed in me since kinder-garten.

When I was in kinder garten I played tricks on my friends. I could not read as well as now. I didnt know as much math either. I had short hair, and now I have long hair. Since then I have changed a lot.

Now I can read, draw, write and do math much better. I dont play tricks on my friends either.

by Iris

e All Change. We All Chage from time to time. I use to Be SMALL
N kinder garten but knowing what I know Now. So many things were New
me But All Or them Old to me Now.

BY RINA

hanges On The Yard Since Ive Been Here
Garrett - Fences and willow trees
Brendan - Dirt Area
Jonathan - Redwood trees and pines
Io - Metal pipe on its side
Auad - Sculpture
Taro C. - Ladder and shelter
Taro P. - Play structure
en - Spools and stack racks
Anthony - Ponds and animals in pond
Martin - Animal cage and beach
Xochi - Slide and pole
Sara - Rocks and shelter
Iris - Rocks and plants

Room 210

Celeste - shelter
Rina - Pond with leaves
Tica - Gardens
Joshua - Eucalyptus
Michelle - Sticks, trees and pond
Traci - Sand around redwoods
Danielle - New trees
Molly - Fenced in area
Eurydice - New fence
Derek - Railroad ties
Yolanda - Weeds

Naomi
Jan. 113

Things We Can Do With Seeds

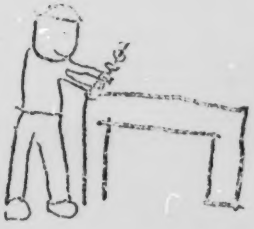
I can make a string of seeds to make a neckless to go around my neck.

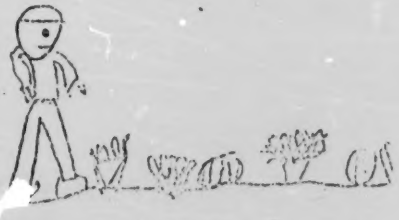
I can plant the seeds in my garden. I have vegetables in my garden that came from seeds.

I can eat the seeds.

I can cook the seeds

Lots of animals eat seeds



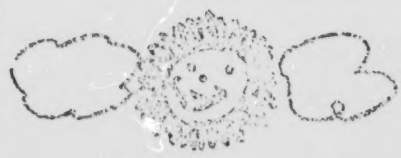


Cycles
Jessica
Room 102
get up
go to bed
Room 102
Cycles
Katie
get dressed
go to school
Room 102
Scott
Cycles
Bobette
Room 102
Jason
eat dinner
flowers
Watch TV
get out of school
flowers die
small plants
flower seeds
compost
eggs
garden
tadpoles
reservoir
evaporation
rain
clouds
frogs mating
frog
rabbit
rabbit droppings
food for rabbits

Planting News

I Planted Collar green Seeds My Plant grew in The green house. I Watered it and took Care of it every week. I took my Plant home on a Friday.

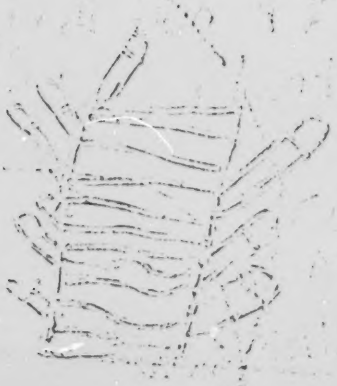
the other day We planted some Wild flowers and they looked pretty now that they are growing.

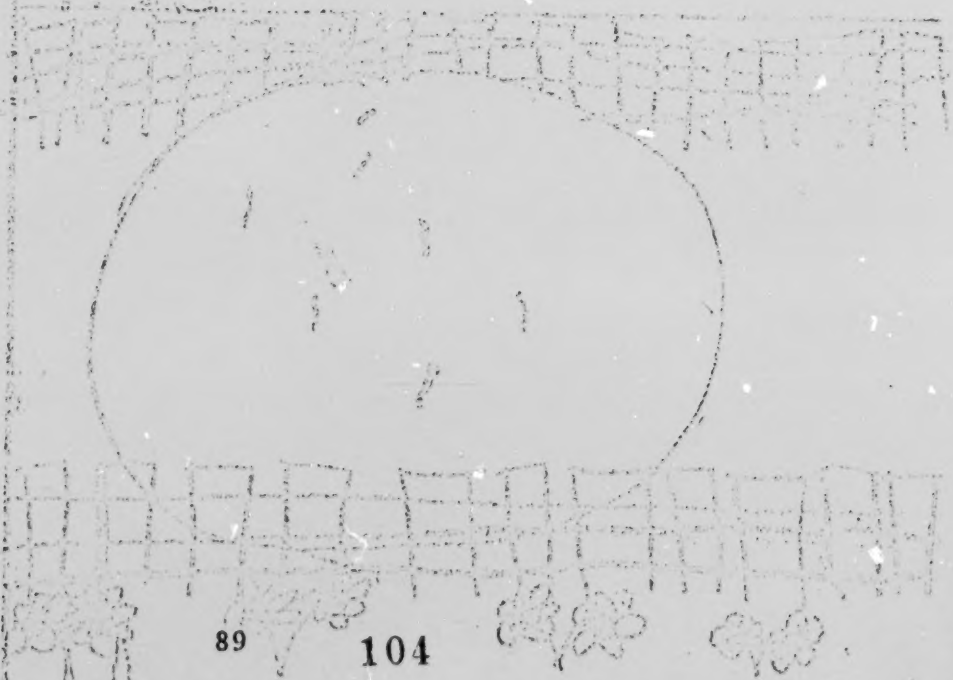


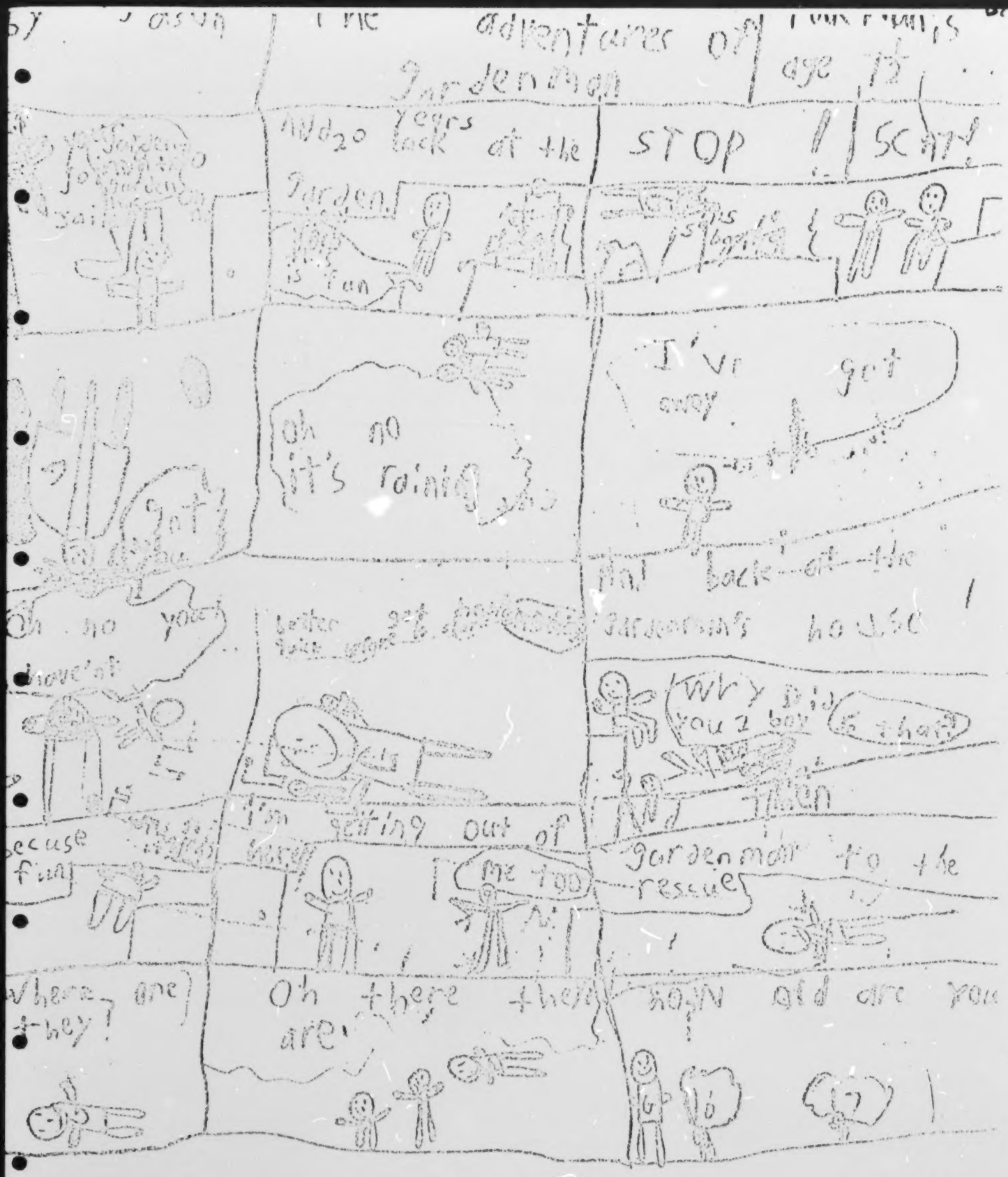
one Sunny day we went out on the yard we planted an Acadia. It was really easy but it was Boring to Some kids It all right to me. I didn't do that much because everybody was crowding around me and I don't like being crowded around and we Planted a golden Bamboo tree.

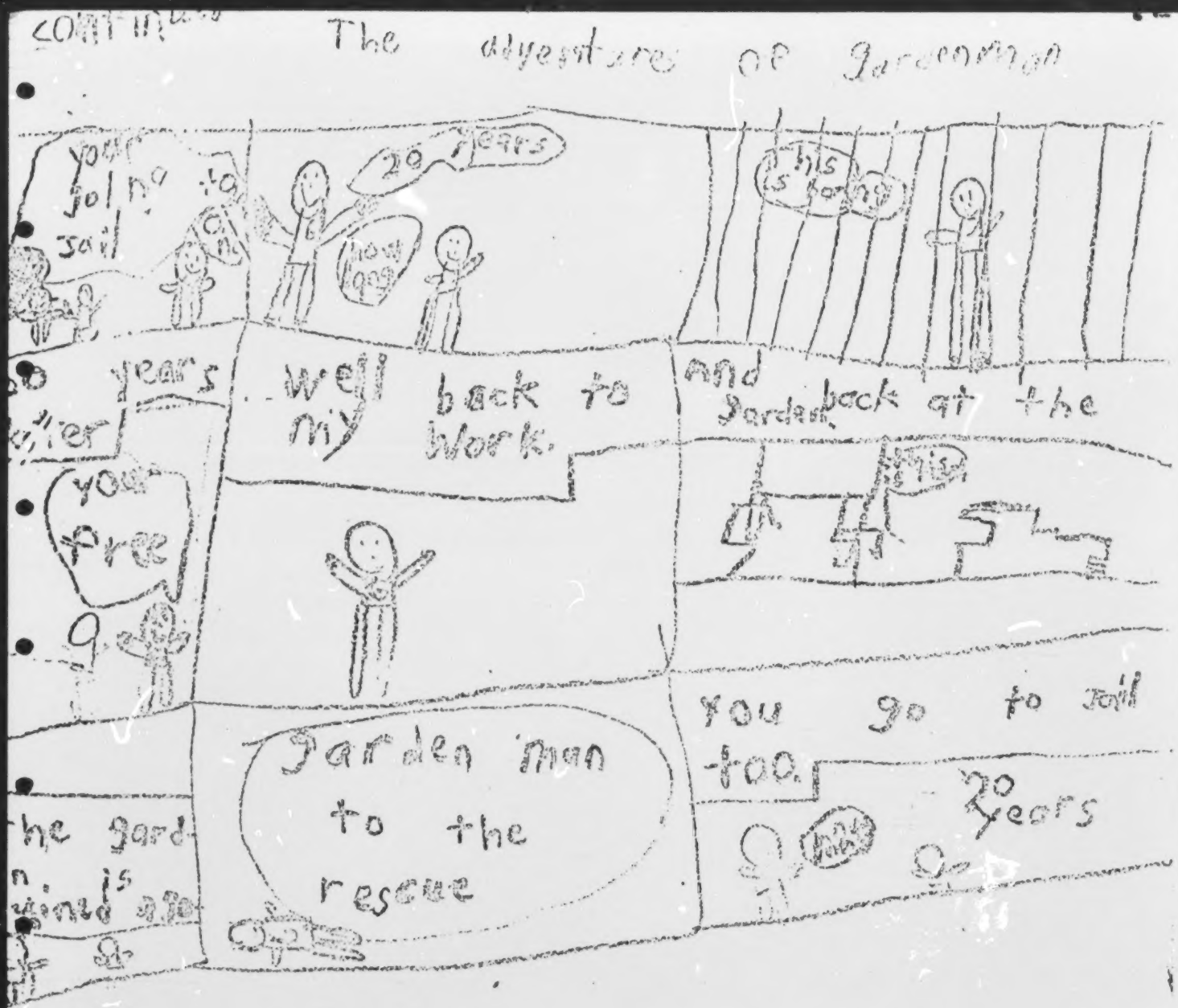
Tree Was planted in the soil at the Grove Street Fence We have to water it so he times

Bamb






The adventures of
Jardenman
STOP !
Scatt
Oh no it's raining
I've got away.
Oh no you've
Why did you buy that?
Then
I'm getting out of here!
me too
Jardenman to the rescue
Oh there are they!
there they
How old are you?


The adventures of Gardenman
20 years
years
well my back to work.
and Gardenback at the
Gardenman to the rescue
you go to jail too.
20 years

APPENDIX B

Environmental Curricular Activities Conducted on WEY 1975-1976

The following is a list of activities engaged in by children at Washington Environmental Yard (WEY) at Washington Elementary School, Berkeley, California, in the school year 1975-1976, as documented by a team of participants and observers. The list is broken into six parts: (1) observation, (2) maintenance and improvement, (3) Cognitive learning, (4) Motor skills learning, (5) Sharing and (6) Other. While sections 2 and 3 are probably fairly complete, the other lists are, of necessity, only partial. Many of these activities encompass more than one category -- our goal was to integrate activities into the whole learning process -- but are listed in only one category. Some activities were short term and some lasted the entire year.

Observation (environmental awareness)

--Discovery - Activities in which one sense is isolated and used to perceive natural phenomena indoors and outdoors; i.e., feel-a-bag game, blindfolded walk, determining area by sound alone, etc.

--Exploration - Activities involving all senses in unison, leading toward perception of types of areas and some relationships; i.e., between organisms and environments, between environments and micro-climates, between "living" and non-living" things, etc. (whole yard).

Yard Maintenance and Improvement

--Maintenance (primarily in Natural Resource Area)

Pruning trees, shrubs

Fertilizing trees

Watering trees, shrubs, seeds

"Litter parade" - after lunch picking up lunch litter, separating litter into foodstuff, aluminum and plastic (on Yard), weighing and graphing weight of each category (indoors)

--Improvement

Planting trees, shrubs, seeds

Measurement of height, diameter, root ball, etc., of trees and shrubs

Observation of variety of leaf shapes, textures, sizes, etc.

Painting life-size whales on Yard

Comparison of human body size to whale size

Indoor study of life of whale

Environmental banners (themes of "wind", "water cycles", etc.)

Designed, cut out and sewn together in class

Hung from school walls outdoors

Yardfest - Many above activities aimed toward communitywide festival on Yard

Yard Compass - Four-point compass painted on asphalt Yard

Cognitive Learning Activities

--Seed Study - Shapes, sizes and colors of different seeds; counting number of seeds per pumpkin (classroom); planting in variety of soils (greenhouse and Natural Resource Area)

--Gardening - Clearing and turning soil, discussion of soil types, of insects found, etc.; planting and caring for seeds (greenhouse and garden); composting (see next section); transplanting, watering, weeding, thinning, harvesting, cooking and eating produce (indoors), or feeding to rabbits (see next section).

--Composting - Establishing food chain: rabbit feces -- compost -- garden -- greens -- rabbit -- rabbit feces and second chain: children's food -- rabbit -- rabbit feces -- compost, etc.; and third chain: children's food -- compost -- garden -- vegetables -- children

--Weather

Recording, graphing soil and air temperature using metric and farenheit thermometers

Making weather instruments (resource room)

Studying rain: fog, dew, evaporation, condensation, precipitation, cloud formation (indoor/outdoor)

--Ecology (much of this centered on pond-classroom aquaria)

Habitat studies - pond, redwoods, chaparral, meadow, pine, softwood forest, urban vacant lot (influence on WEY)

Populations - natural resource area and classroom aquaria

Aquaria and other animal study using classroom and yard animals (mice, birds, earthworms, sowbugs; and chickens, chicks and ducklings)

--Mapping - Learning to read and make maps, focusing on WEY, classroom, making a "treasure hunt", mapping ecosystems on WEY

--Trees (see also Yard Maintenance and Improvements)

Research on place of origin of trees on WEY, natural habitats, uses of trees commercially, in ecosystems

Celebrating planting of trees - singing "happy birthday", "adopting" a tree, following its growth through years

"Sharing" Activities Related to WEY

Journalizing personal observations of changes or experiences on WEY

Writing poetry on WEY.

Logging and journalizing a growth of plants, climatic changes, and all other EE activities of class.

Writing and publishing "Environmental Yard News" bulletin.

Weekly meetings to discuss past and proposed WEY changes.

Reports back to classroom by group engaged in project on WEY.

Motor-Development Activities on WEY

Balancing: on fences, hanging over pond, jumping from rock to rock, playing on gymnastic equipment

Other WEY Activities

Entire day spent on Yard in classroom studies by one class

APPENDIX C

Seed Cards

1. Code Card*

2. Statements explaining codes*

3. New Seed Cards developed by PEET

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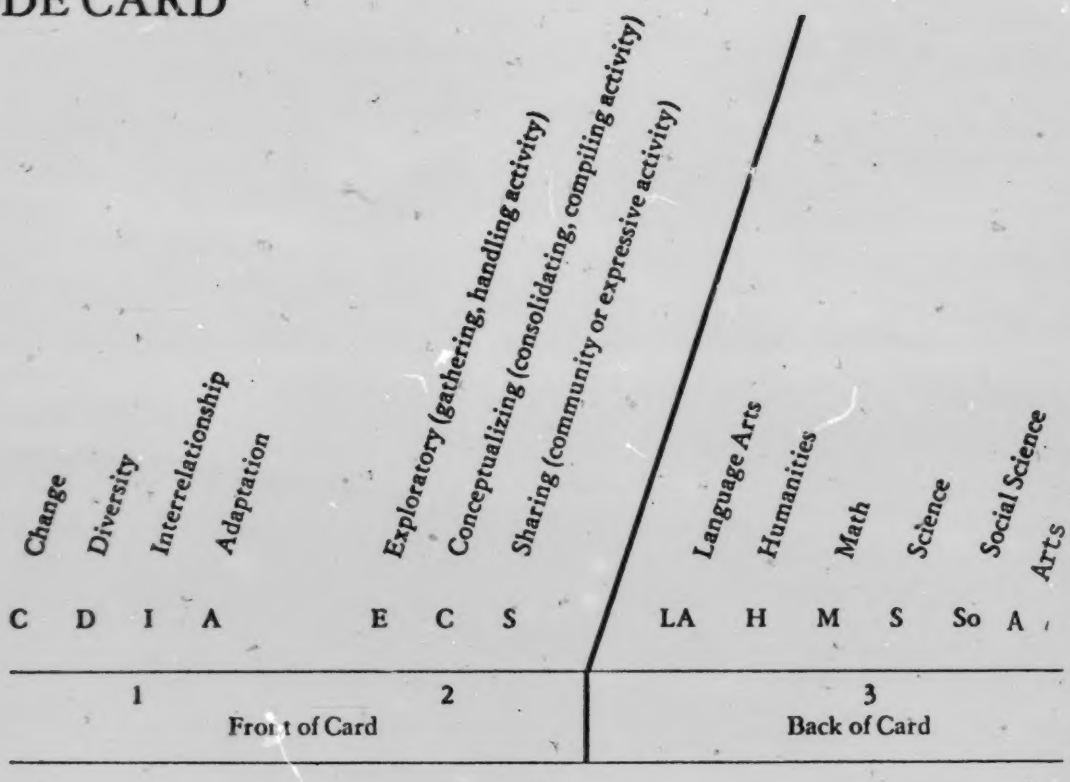
CODE CARD


Change
Diversity
Interrelationship
Adaptation
Exploratory (gathering, handling activity)
Conceptualizing (consolidating, compiling activity)
Sharing (community or expressive activity)
Language Arts
Humanities
Math
Science
Social Science
Arts
C D I A E C S LA H M S So A
1
2
Front of Card
3
Back of Card

CHANGE

Everything changes!—living and non-living materials throughout the world, as well as the materials and experiences in the specific environment in which students learn, change. This concept can be woven into personal consciousness throughout all learning experiences.

DIVERSITY

Diversity is evidenced in patterns within events. For example, recognition of pattern based on observation permits us to predict events. Among all living and non-living things there are no two alike, although they may be similar. The concept of diversity enables students to be aware of the vast complexity and beauty of the environment.

INTERRELATIONSHIP

All things are interrelated. Weather cycles, seasons, food chains, and societies are examples of interrelationships. If all parts of the learning environment—people, objects, and ideas—are allowed to interrelate in as many productive ways as possible, students will learn the need for and develop an appreciation of the interdependence among interrelated factors.

ADAPTATION

Living and non-living materials are adapted through environmental conditions over time. Adaptation can be observed in all disciplines, for example, science-evolution, social science-revolution, and in the arts, styles of expression adapt to the conditions of the times.

GENETIC CODE 2

The second code on the bottom of the GENERAL card side suggests the major processes inherent in each activity. Some children may be ready to relate to an activity, to all three units; others may initially need to be limited to a single process.

E = Exploratory (Data gathering)
Students handle material, ask questions of the teacher, other students, and the material.

C = Conceptualizing (Data compilation)
The compiling of data gathered during the exploration.

S = Sharing (Data sharing and organizing)
This is a community activity in which children express their data findings and relate them to other data.

GENETIC CODE 3

On the back of each card a specific activity related to an identified subject area is suggested. The subject area circled indicates the emphasis of the activity.

LA = Language Arts
M = Mathematics
H = Humanities
S = Science
So = Social Science
A = Arts

You may wish to emphasize a subject area or group of subjects of your choice. Our example should not exclude other subject areas. Again, the student may undertake these activities independently or under teacher supervision.

D I A C E C S LA M SO-H S A

BLIND FOR AN HOUR

SENSE OF SIGHT,
EMPATHIZING

Experience what it might be like to be blind

1. Put on a blindfold while the teacher is reading a story. What is the difference between listening to a story blindfolded or being able to see?

2. Put on a blindfold and have a partner hand you several objects. Can you guess what they are? Which ones are easy? Which ones are hard to guess? Try smelling or shaking some objects. Does this help you to guess?

3. Put on a blindfold and hold on to a partner's upper arm. (This is the easiest and safest way to use a sighted person as a guide and something all blind people learn to do). Let your partner lead you around the room until you feel comfortable. Practice several things such as sitting in a chair blindfolded, sitting on the floor, etc.

MORE ACTIVITIES

1. Let your partner lead you outside on a "trust walk." Tell your partner to take you to places she/he thinks might be fun, but safe. Explore these places. Can you guess what they are? If possible, take a tape recorder with you and record what sounds you notice and how things feel and how you feel!

2. Sit quietly and listen. What sounds do you notice? How many can you identify?

3. Stay in the classroom with a partner before school, after school or at recess. Try walking around the room without a partner. First practice walking toward your partner across an open space. Then, start at a wall and walk around the edge of the classroom. Can you tell where you are? Have your partner lead you to different places. Do you know where you are? What kinds of clues are there to tell you?

4. Go with your partner into the hall, outside, in the bathroom, etc. How can you tell where you are?

5. Try other activities blindfolded such as sitting, writing your name, using blocks, skipping, catching a ball, eating, dressing, tying your shoes. Which are hard? Which are easier? Why do you think so?

6. Make a list of things that might be hard for a blind person to do. Try some of them blindfolded. Which were easier than you thought? Which were harder.

7. Read about Helen Keller or Louis Braille, two famous blind people. What could they learn to do?

8. Find out what tools blind people learn to read and write with. Are some of them ways you use to learn with too?

CREATURES IN THE POND

POND ORGANISMS
POPULATIONS
HABITAT
FOOD CHAIN

1. Explore the pond in our yard. With a bottom scraper or net, get a sample of pond creatures. Put them in a jar or an enamel pan. Observe quietly for a few minutes. How many different kinds of creatures do you see?

2. Get different samples from different parts of the pond (pond's edge, the open water, its deep bottom.) Are the creatures in the different samples the same or different? Why do you think they live where they do?

3. Keep a sample of the pond water in an aquarium for a week and observe the organisms.

   a) Which organism has the largest population in your sample?

   b) Can you find a food chain among the organisms in your sample?

MORE ACTIVITIES

Imagine what it might be like to live in the water in a pond. How would it feel? How would things appear with sunlight shining down through the water?

Write a short story from the point of view of an animal that might live in a pond environment. Tell what a day in the life of that animal would be like.

Illustrate your story.

D I A C E C S LA M SO-H S A

LET'S KEEP TRACK OF THE WEATHER

RECORD KEEPING,
INFERRING,
GENERALIZING

1. Take air temperature in and outside each day for two weeks.
2. What observable weather conditions might have been responsible for the readings?
3. Make a record of the above findings.

   For example:

Inside	Mon. 10/1 72°	Tues. 10/2 72°			
Outside	56°	59°			

4. What does your record tell you about the weather in your area at this time of the year?

MORE ACTIVITIES

1. Choose a spot in the yard and take the soil temperature.
2. Record the readings for two weeks.
3. Make a bar graph of the temperature readings.
4. Make a line graph or some other kind of graph of the same readings.
5. Is the soil temperature related to the air temperature in some way?

Ⓓ I A C E Ⓒ S LA Ⓜ SO-H S A

PARKING LOT MATH

BASIC SKILLS:

COUNTING,
ADDING

1. Go to the school parking lot. Copy all the numbers found on the license plates of cars. Work with a classmate. Check each other's work.

2. Add up all the digits until you end up with one digit. (If the class does the same cars, the digit will be the same) e.g., 380 DGK - 3+8=11 - 1+1=2

3. Everyone who did this activity at any one time should come up with the same "magic number"!

MORE ACTIVITIES

1. Why are cars licensed? Try to find out.

2. Stand at a street corner and record the license plates of passing cars. Use only the first digit and letters and keep a tally of identical numbers and letters for a period of five minutes. Make a bar graph and share.

3. Arrange the digits from license plates of a number of cars. Make the largest number you can read and write (e.g., 8, 764, 210). Now make a number that is the smallest one you know.

4. Look at a license plate carefully for a few minutes. Walk away and write down the license plate numbers and letters. Check. Were you able to do it correctly?

5. Make math problems from car license plate numbers for a friend to do. You check the problems to see if they are correctly done.

(D) I A C (E)(C) S LA (M) SO-H S A

"HOW HEAVY ARE YOU, MY PUMPKIN?"

GARDENING,
ESTIMATING,
WEIGHING,
COMPARING,

1. Harvest 3 or 4 pumpkins from your garden in school (If there aren't enough, bring some in from home).

2. Choose one pumpkin. Have everyone in the class guess its weight. Record all answers. Label the pumpkin.

3. Weigh the pumpkin. Compare everyone's estimation with its measured weight.

4. Do the same with the other pumpkins. Estimate each one's weight, then weigh it. Did your estimation improve?

MORE ACTIVITIES

1. Remove the seeds from a pumpkin.

2. Estimate and then count the number of seeds.

3. Use the pumpkin to make pudding or pie.

4. Bake the seeds, salt and eat. You may also use the seeds as counters in your Math Center.

D I A C E C S LA M SO-H S A

EAT A BEET

GARDENING,
COOKING,
SENSE OF TASTE,
PARTS OF PLANT

1. Harvest some beets from your garden in school.
2. Identify the different parts. Look at the root hairs.
3. Cook some leaves and eat.
4. Cook some stems and eat. Try some raw.
5. Cook some roots and eat. Try some raw.
6. Which part of the beet plant do people usually eat? Which part do you like best? Why?

MORE ACTIVITIES

1. Use the water from cooking the beets for dyeing. What did you dye?
2. Make vegetable prints by using the cross section of root.

(D) I A C (E) C S (LA) M SO-H S A

LICENSE PLATE LANGUAGE

BASIC SKILLS:
ALPHABETIZING
MAKING WORDS

1. Record all the letters on car license plates in the parking lot.
2. Check to see if all twenty-six letters of the alphabet are represented. What letters are missing?
3. Put the license plates in alphabetical order.
4. Be a wordsmith and make a square around each vowel. Make a triangle around each consonant.
5. Make a list of words that use these letters. Make sure they are real words.

MORE ACTIVITIES

Use the word lists to write a story. You may use other words to make your stories more interesting.

Illustrate the story.

Why do the license plates now have months and years listed on them? List the months on the plates and tally to see how many there are for each month. Make a bar graph.

ORGANISMS FROM A TO Z

BASIC SKILLS:
BEGINNING SOUNDS
ALPHABETIZING

(You may wish to do this with a partner)

1. Take time to do a thorough count of organisms in the yard! You may need to go out at different times throughout the day.

2. List all the organisms you find.

3. Arrange them in alphabetical order; for example:

   A - ants, aphids
   B - bees, birch
   C - caterpillar
   D - daisy

4. What did you discover?

MORE ACTIVITIES

Make similar lists "from A-Z" with:

1. Games you play.

2. Feeling words that have to do with the out-of-doors.

3. Man-made objects in the yard.

D I A C E C S LA M SO-H S A

WIGGLIES

EXPERIMENTING,
COMPARING,
ESTIMATING,
PREDICTING,
RESEARCHING

1. Find out the environment worms seem to prefer by putting five worms in each of the following: sand, soil, mud, sawdust.

2. Based on your finding, make an environment for worms.

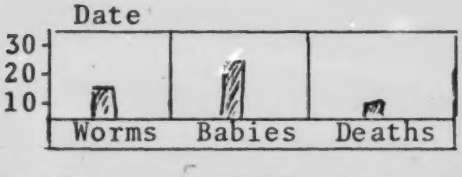
3. Find out what worms eat. Include this in your worm environment.

4. Measure and count each worm that is put into this environment. Date and record:

   3/1/76
   Worms - Inches - Babies

1	2	1
1	1½	0

5. At the end of one week, count number of worms. Make a bar graph like this:



6. Estimate the following week's population growth.

MORE ACTIVITIES

1. Pretend you are a worm. Where would you like to live? Why? What would you need? How safe are you?

2. Pick up a worm. How does it move? Can you move like a worm? What words can you think of to describe a worm's movement? Write a poem using your worm words.

3. How do worms fit into the food chain? Find a food chain in your yard that includes worms. Draw your findings.

4. Have an imaginary visit with a worm. Describe your day.

LITTER PARADE

PROCESS SKILLS:
MEASURING,
MAKING COMPARISONS,
DRAWING CONCLUSIONS,
INFERRING,
CATEGORIZING,
ESTIMATING

1. Go to the yard or any designated area. Look for litter. Make estimates of how much is there in weight, amount, etc.
2. Collect the litter.
3. Sort the litter into categories: aluminum, plastic, paper, food remains, wood or other metals.
4. Count the amount of each category. Make a graph.
5. Weigh the amount of each category. Make a graph.
6. Discuss your findings and your estimates. Make Comparisons.
7. What are some of your conclusions?

MORE ACTIVITIES

After the litter parade,

1. Recycle the materials.
2. Compost samples of each to see what happens.
3. Make scrap collages and paint the collage.
4. Make collections and graph for a month. Is the litter different each day? Draw conclusions.
5. Do some research. What can we do with litter? What is pollution? How do we avoid litter and pollution in general?
6. Watch your refuse at home. Collect, measure and graph during a week. What observations and conclusions do you have?

D I A C E C S LA M SO-H S A

WARNING SYSTEMS IN YOU

SENSE,
HUMAN BODY

1. Why does your stomach growl?
2. Can you list other body warnings?
3. What do you do when you get these warnings?
4. Put it down on a chart like this:

Warnings	Action
Nausea	Get fresh air, lie down
Bleeding finger	Put under cool running water, get a band aid

5. Share your chart with your class.

SOME THINGS TO THINK ABOUT:

1. What social customs do we have with body warnings (e.g., putting hand over mouth when we yawn, saying "excuse me" when we belch)?
2. What parts of our body are involved in giving a warning (e.g., our nervous system is involved when we shiver)?

ME AND MY GARBAGE

ATTITUDES
VALUES

1. Make a record of what you throw away during the day in the classroom.

2. Make a chart with the following headings:

   What I threw away
   Why I threw it away
   How I could have used it again

3. Record every item you throw away. If you throw away three pieces of paper, write each one down.

4. Compare your "throw aways" with those of others in the class. What was thrown away most often? What was thrown away least often? Who threw away most? Least?

5. Brainstorm ideas for ways of re-using each item thrown away (For example, used scratch paper could become paper airplanes. A broken paper cup could be used in a collage).

6. Post a list of these ideas above the trash can.

MORE ACTIVITIES

1. Visit the city dump. Do you see things there that could have been recycled?

2. Get together with friends and make a list of ways you can cut down on waste at school or at home.

PEOPLE AT LUNCH HOUR

ATTITUDES
FEELINGS

1. Pick a place which has a lot of people during the lunch hour.
2. Map the area.
3. Approximately how many people are in the various areas?
4. Make observations about what they're wearing. How many are eating? How many look tired? How many look happy?
5. With a cassette or with pencil and paper, interview (briefly) 3 people about what they are thinking or how they are feeling.
6. Share the information.

MORE ACTIVITIES

At noon or other time of day, observe a street intersection that has stop signs. Note each type, make and year of car, the characteristics of the person driving (e.g., male, female, young, elderly), and the way the car approaches the intersection (e.g., fast, slow) and where it stops (e.g., in the crosswalk, before the crosswalk). Look for patterns in any of the data collected.

D(I)A C E(C)(S) LA M SO-H(S)(A)

BLOCK CITY

MAPPING

1. Build a city with blocks.
2. Put a large piece of paper on the floor. Draw the buildings on the paper. Label them if you wish.
3. Now, put North, South, East, and West on your map.
4. Take down your block city and put your map away.
5. On another day, try to build your city again from your map.

MORE ACTIVITIES

1. Make a map of your classroom or your school yard. Label it with the four directions. Mark a spot on your map with an 'X'. Give your map to a friend. See if your friend can find the marked spot in the classroom or outdoors.
2. Many kinds of maps are used in different places and for different reasons. Get together with a friend and list as many kinds of maps as you can think up.
3. Get down on the floor and be at the level of your block city. On a piece of paper draw what it looks like to you. Now stand on a chair and look down at your block city. Again, draw what you see on a piece of paper. Tell why you think the two pictures are so different.

SOUNDS AND YOUR BODY

MOTOR ACTIVITY
SENSITIZING

1. How does the sound of a siren make your body move? How about the tick of a clock or the music of a marching band? Do you move your whole body or just a part of it?

2. Try to move to the following sounds:

   - roaring waves of the ocean
   - chimes of the chapel bells
   - laughter of a group of children

3. Share your ideas with your class.

4. Do other children have different ideas for these same sounds?

MORE ACTIVITIES

Associate a sound with an animal's body movement (skateboard on cement is like a cat when he is ready to attach, children jumping rope is like a ticking clock).

How does man imitate the sounds in his environment? Name some musical instruments that we use to imitate the many sounds in our surroundings. Listen to Peter and the Wolf for ideas.

D I A C E C S LA M SO-H S A

FROM ICICLES TO VOLCANOES

MOTOR SKILLS
CREATIVE MOVEMENT

1. Pretend you are an icicle or snowflake. Move around in your space. Are you hot or cold?

2. Pretend you are boiling water, a camp fire, or a volcano! Move in your space. Feel your hotness.

3. Experiment to see how hotness makes you move (standing in front of a fire, drinking hot soup). How does coldness affect you? (being outside on a cold winter morning, drinking cold lemonade on a hot day, standing in front of an open freezer)

SOME THINGS TO THINK ABOUT

How do you or most people feel on a hot day? How do you or most people feel on a cold day?

Do people feel the same about being hot or cold? Or do you think people have preferences?

When are you most active? Most quiet?

Does weather affect your movements and moods? How?

APPENDIX D

Entry Sessions

1. Explanation

2. Notes from two typical sessions

Entry Sessions

Entry sessions involving most or all of the PEET staff and up to seven teachers were held between October 28, 1974 and January 13, 1975.

Each session involved the same sequence of activities covering the entire day from 9 a.m. to 3 p.m. In the morning teachers were encouraged to share their general "philosophy" of environmental education. Following that each teacher wrote on a 3x5 card what their strengths and interests were, for future use in curriculum development. Following that, at about 10:00 a.m. the group went out onto the Yard, if they weren't already there, to walk around on it and imagine that they were their students' ages, playing on the Yard. Then they were told to imagine they were teachers, using the Yard for school work. After spending an hour or more on that, they gathered together to share their thoughts.

After lunch a thorough explanation of the "Seed Cards" was made, involving the group in a deeper introduction to Project WEY's EE philosophy.

Following that the documentation and other logistical, routine aspects of the project were explained.

The afternoon ended with an evaluation of the day and several hours of open-ended planning time.

Tues., Nov. 18 Notes on another entry meeting taken by Angela

Philosophy- What does EE mean to you?
Man is a participant in the universe - a part of the scheme of things, not the manipulator that he thinks
Caring for natural things
Focus on the indoor and the outdoor

Strengths and Interests - list them on 3 x 8 cards
Sharing of above(Pearline, Mel, Angela, Jerry, Tom, Robin, Sue, Manny, Whitney, Bob I.)

Child/teacher role playing- (each to spend 20 min. as a "child" in the yard - writing things down that would interest children)

Sharing	Child	Teacher
Jerry	hiding places, barriers, diff. heights, throwing things into the pond, fascination of water, diff. places to sit, rest, play, darkest point/sunny places in yard	*of quiet spots, describe effects of - moods - quiet/ noisy places, water in pond - ... where from? Utility aspect of water. How does flower grow - measurement - fencing, dif. aspects of protection, effects of pond throwing, growth of things in sunny/ dark places

Question - definition of your quiet place?
Ans. - depends on the person, on the mood. Seclusion vs. intrusion

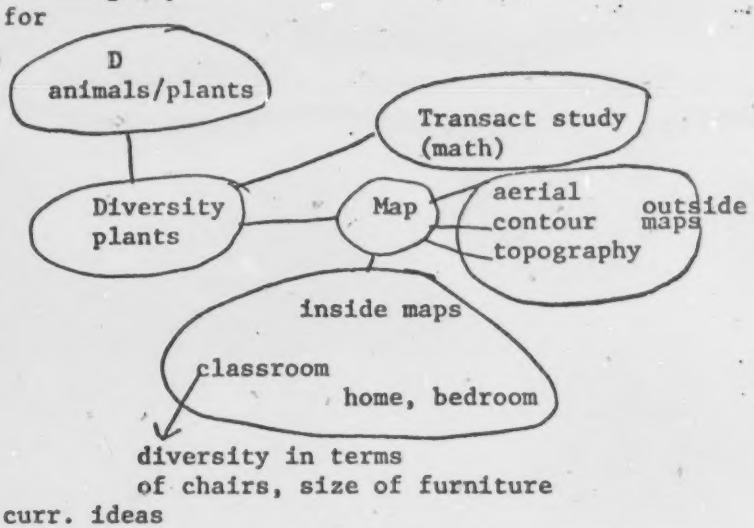
Manny Many	rocks, fish, things in pond, places to sit, trees, pond, trash, flowers	tree, book identify pond - count living things, non-living flower - to press trash - why, how clean pond water - exam., observe, record
Mel	turtle dove, dead bird in trash can, pine trees look different - why? very few insects today, old bike tracts, noise of cars, blackberries (dif. colors), flower petals broken	dead bird - design around eyes (missing), obs. over a period of time - plant dandelion seeds, pine - tree - interview people who know as to why different, tasting dif. berries of dif. colors
Sue	as a child, unaware of environment, throwing rocks in pond, catching and looking at everything moving in the yard, finding out what's locked in box, wanting to have yard all to myself sometime (eat berries, grow things) bringing into classroom things to look at.	creating environments in classroom - safe place to throw rocks, writing something in point of view of pond inhabitants in terms of stones being thrown in - growing things (SCIS community unit) creating a corner in yard - observing it periodically getting out in yard all by himself

Sharing	Child	Teacher
Pearline	Pond	Kinds of organisms - why there? Kinds of animals that come for whatever - food web concept
	berries trees	as habitats, man's use of trees
	logs clubhouse stones	for jumping, what's underneath
	large tree trunks	
Tom (Tom's childhood in East Oakland)	new grass coming up, making grass mazes, milkweed, "ladies' smoking tobacco" - acacia forest, pansy hill, poppy hill, abandoned well - catch water dogs there, abandoned mines, "devil's punchbowl"	
Whitney	patches of flowers, ways trees grow, why people want to throw things into pond, dif. flowers, colors, soft & hard leaves, forms of plants, hazel nut - how its fuzzy - how seeds disperse - dif. kinds of leaves, needles	categorizing - interdependence bet. seeds, birds, trees, flowers, kinds, families - influence of water, care of nature & natural things, not picking things - how do hills get there (big hills - geology - land form changes)
Bob	Muddy area - prints, foot prints, dif. kinds of plants, how tall are trees, leaf shapes - size, where on plants, colors. rocks - dif. colors bugs - kinds howmuch do trees, plants grow each year - where's stuff inside plant talks, temperature at dif. places out at yard - kinds of organisms in pond - noises - dif. kinds - outside	flowers - colors - paints, crayons, match colors of fl flowers - flower press, time line of life of flower - what it looks like at dif. stages - creative writing of a dandelion (or other kinds) measure circumference of flowers - discuss care of living plants, flowers, etc.

(Continued on following page)

Explanation of a Seed Card -
explain coding
share some of the "rejects" with the group
Herb shares his "circle" idea for curriculum materials = operational model

(1)



(2) find stations out in yard for curr. ideas

Don explains cummunication forms
Angela's form also

Lunch together in the yard

Evaluation - Implementation
being in school but not being in charge gives new perspective
rekindling of things Bob has gotten away - different ways of looking at things outside
get input from many different other people
good to use school day to do this
getting different perspectives of looking at the yard

Implementation
duplication of pond - terrarium, aquarium
Starting with ideas of "child role playing" (Bob I)
have children go out and do some things we did today (Whitney)
brainstorming on the cards - get many ideas out of one card

Entry Day - Tuesday - Dec. 9, 1975 E.E. 1975-76

Present: Cox, Shannon, Wong, Lewis, Wolf, McKinney, Long, Williamson,
Student Teachers: Engle, Cook Ciarretto

ENVIRONMENTAL EDUCATION - WHAT IT MEANS TO EACH PERSON?

—learnigg one's whole environment - inside and outside
—E.E. means to live outside
—everything is interrelated - all is in a chain - home environment is a part of it
—concern with noise
—problems that exist that human beings have created
—importance of noting your place in scheme of nature - E.E. is environmental appreciation of what's around us
—E.E. is appreciation and involvement - children should become responsible for their environment
—children get "ingrain" ideas from adults - anything you don't want, throw out door - we don't have attitude toward the outside as we have attitude toward the indoor
if child has something to do with the planting of a tree, he takes care of it
—is E.E. in conflict with our "kind" of society - fast cars, tech. progress, etc.?

EACH PERSON'S STRENGTHS/INTERESTS

—Sharing with the group

ROLE AS CHILD AND AS TEACHER

	As Child	As Teacher
Sonia	feel dry leaves, hard ground, dirty water bothers her, like the different size boulders, different kinds of trees, wild berries. - - - - - - - - - - - - -	lesson on senses, making maps make dye
Rima	texture of fence, trees, wagon wheel	study things as individuals, uses of wheels need quiet places
Mark	rocks, fences, trees, pond	learn about plants, learn about animals, how does man change his environment (positive? negative?)
Elinor	intrigud by soil - different colors— dark brown in gazebo, hard, grey in places where path is	explore soil, collect data - measure shadow at different places/times/ make graphs
Jane	liked to manipulate the environment - fences, high places, stones, creek, lying down watching creatures in grass, on trees	Studying small things
Jeanne	collecting, naming things (nests, stones, etc.), paths	collection display map-making, write imaginary stories, naming things (Winnie-the-Pooh)

	As Child	As Teacher
Jeanne (continued)		Wind in the Willows to read to class, giving personality to creatures, paths, special places, teach children to sketch - then give words to sketches, descriptive words - word sketches
Limitsoi	grass to roll in (she misses it) sand for building, creative play, setting up territories	Use parents as maintenance team - using families, classrooms

Don talked about documentation
Angela explained the "SEED" card
Literature is passed out

EVALUATION

—make me aware, set up and think
—appreciate the pace of today - sit and devote time to this whole thing
—very essential
—appreciate role as child/teacher - gain perspective - like the pink documentation sheet
—still feel she doesn't know everything - (L. Williamson)
—very conscious of the whole valuing thing
—like the outside being a "living classroom"
—beautiful to see interrelatedness in school
—bring sense of beauty from nature to one's home

APPENDIX E

Brainstorming Sessions

1. Explanation

2. Notes from one session

Brainstorming

Explanation

Three brainstorming sessions were held involving all classroom teachers. The following page shows a typical agenda, and the detailed notes indicate the kinds of discussion that occurred.

The purpose of the brainstorming sessions was twofold. First, a few teachers, frustrated by their inability to find time to create their own Seed Cards, wanted time to work on them and get ideas from others on their creation. Second, the PEET staff wanted to encourage the teachers to dig a little deeper in applying EE concepts to their routine classroom teaching and broaden their conception of EE. The "brainstorming" method, beginning very generally and gradually, focused on specific issues and seemed an effective technique.

February 27, 1976

WORKING AGENDA FOR TUESDAY, MARCH 2, PEET

9:00-10:15	Open Ended brainstorming
10:15-10:45	Critique of new cards - start new cards
10:45-11:30	Work with children or work on cards
11:30-12:30	Lunch - Informal Evaluation
12:30-1:00	Formal Evaluation of above and discussion of next step
1:00-3:00	Pilot Valuing Devices

PEET BRAINSTORMING/ CARD-MAKING/ VALUING SESSION 3/2/76

Present: Cox, Schulz, Russell, Skotheim, Funk, Goggio, Irish, Shannon, and Young, who took notes. Cox led the meeting.

1. Cox reviewed agenda: 9-10am brainstorming; 10-10:45am review cards; 10:45-11:30 work with kids, if weather improves; 11:30-12:30 lunch; 12:30-1:00 review morning; 1-3:00 va valuing exercises.

2. Brainstorming:

A. Nutrition: discussed originated by Goggio, and was periodically returned to by her, as she is worried over kids eating habits. At previous school worked on nutrition committee; believes correlation exists between diet and reading ability. At Oxford ki ds get ½ pint milk daily. Funk thought it would be interesting to see if breakfast fed group would do better than non-breakfast fed group. There was talk of converting foyer by dining room into kitchen. No cards generated, no conclusions made. Very open format.

3. Review Cards: No new cards had been made to be reviewed.

4. Work with Kids: Due to inclimate weather and general lack of enthusiasm no one worked with kids.

3-4. Discussion of Three SEED PACKET Cards

A. Visiting the shoreline

1. Discussed various shorelinev within reasonable distance.

a. Goggio talked about Alameda Beach where a ranger meets group, shows ill. of marine life from surface to floor of water and from shore to depths. Plays game illustrating food chains with one shild as shark, another as something else. Costs app. $40.00.

b. Other places mentioned but not discussed were Lake Tamascal, Lake Merritt, L.H.S. ponds, Botanical Gardens pond, San Pablo Dam, Briones Reservoir, Pt. Pinole, Pt. Milotte (?), Emeryville Mudflats and Cayote Hills, plus others to be mentioned.

c. Berkeley Marina--focused on as a close-by place. Skotheim mentioned a woman involved in planning open space there who is interested in ideas of school kids. Discussed social studies potential in interviewing fisherpeople for fish stories, observing use of place, going fishing themselves, etc.

d. Berkeley Dump mentioned by Funk an good place to observe birds.

e. Berkeley Mud Flats and Emeryville mud flats both mentioned as good places to study relationship of salt water to fresh water life, birds. From that spun off into study of salt as preservative, and other uses of salt. Talked about trip to salt flats. Cox mentioned difficulties getting in (11:30-2:00 weekdays only, in groups up to 30).

f. From that spun-off onto discussion of creating in classroom various salt and fresh water habitats and raising brine shrimp.

g. Skotheim mentioned ~~xxxixi~~ study of tides and lunar cycles.

h. Young mentioned social study of historical use of shoreline by Russians. Americans, Indians. Funk mentioned remnants of indian use of shoreline on Albany Hill.

i. Skotheim mentioned Yard had shoreline--pond. Goggio expressed apprehension about environment of and health hazards of pond and Berkeley Marina ~~xxxxxxxxxx~~. Others reassured her.

transition: Cox reviewed last week's brainstorming on birds. Funk demonstrated his knowledge of bay area geology--good resource.

b. B. Measuring Yourself

1. Funk: measure how long you can hold your temper
2. Young: told about article re. family who kept such records measuring

Peet Brainstorming 3/2/76 — P. 2

amusing things about selves--how many days can go w/o bath, how long w/o food, etc. and made a "Guinnes" Book of World Records".

3. Cox: measuring height
4. Irish: how many can fit into water pipe on Yard
5. Russell: who can wear who's shoes
6. ---- : pictures of animals on Yard and gitting kids into animals
7. Goggio: pygmies live inside slain elephants' bodies.
8. Young: paint pictures of giant and pygmies on Yard for child's comparison of self.

C. Feeling and the Environment

1. Cox: reviewed other groups" stuff on this
2. Russell: using alphabet--what does "A" say? Move bod to shape an "A" How doses body feel when your mad? happy?
3. Funk: How do you feel when you/if you see (animal)
4. Irish: How do you feel about some of the plants on the Yard?
5. Skotheim: Bamboo in stack sack getting killed--so that especially.

Could ask: 1) what happens to it, good and bad, throughout one whole day--observe. 2) fwhich are good and which are bad things, 3) What can be done about it ~~it~~

6. Skotheim: Go into town in twos, smile at people, see how they respond, and record.

5. Write New Cards: Cox reviewed B G Y --lack of comprehension of all codes and of understanding of how to dode own cards.

Teachers made cards. Teachers shared their cards:

A. Funk: (kept his, wanted to re-do them.) Had seven activities which had potential as seven separate activities.

B. Goggio: Didn't code her cards--didn't have eno-gh familiarity with them.

Nutrition

1. Breakfast
   A. Kids talk about what they eat for breakfast
   B. Teacher shows pictures of nutritious breakfast foods (materials gotten from Cal. Dairy Council)
   C. Children make callages from magazine pictures
   D. Children play with pictures which have been 'contacted' by teacher
   E. Children bring (& teacher) examples of snacks and nutritious breakfast
   G. Children can do a math project on comparative cost of nutritious cereals etc. at supermarket.
   H. Children can keep a record on how they feel when they eat well before t they come to school.
2. I. Dental hygiene is introduced--
   A. Children learn not only to brush and floss but what effect food has on good teeth.
   B. HYginist can come from Diablo Valley to instruct children
3. C. Lunch--
   A. School lunch program can be observed.
   B. Same process as breakfast
   C. Introduce feeling when child eats well.
   D. Discuss feeling when children eat in fidderent environments--noisy, quiet, friendly, hostile, etc.
   E. "Magic Circle" what foods make you feel good, bad.
   F. Is there a way to grow anything that would help us eat well.
   G. Take off on garden--Safeway, etc. etc.
   H. Trip to Farmers Market— fits in with Yauba 3rd unit
   I. Compare foods of Yourba to ours and on and on.....

C. Irish:

1. 1. Earth and Sun Position
   A. At a regular time each sunny day, weekly check the shadow of a fixed object in the Yard.

B. Make a semi-permanent mark on the playground to indicate shadow.
C. Observe the changing shadow patterns from the previous time
D. Make a sun dial on the Yard. Have children mark times on dial according to clock time.

C D I A E C S

2. Mapping I (Room Environment)
A. Show children map of room. Point to a pasticualr spot on the map. Have child go there and tell what he finds there.
B. Have child place an object on something in the room. Ask another child to come to the map and point where the first child placed the object.
C. Place numbered signs around in various places in the room. Have each child put the numbers on individual maps where they find them.

C D I A E C S

3. Mapping II (Outdoor Environment)
A. After studying map of the yard, ask children to go to a certain place pointed out on the map and come back and report what feature (tree, bridge, etc.) they found there.
B. Have children take a trip around the Yard marking their trail on the map. When everyone returns, let them swithch maps and follow the map of someone else.
C. Place -umbered markers around the Yard. Give each child a map with numbers on and a paper divided into the number of sections as you have numbers, Send each child out to draw what they find at the numbers.

C D I A E C S

4. Mapping III (OUtdoor Environment--More Specific)
A. Give group written directions for a walk around the Yard. Have a different child lead the group after one or two directions have been followed. Trace route on map.
B. Treasure Hunt--Each child is given written directions to a certain spot. At that spot the next set of directions are given. Continue until child has reached spot where "treasure" is hidden.
C. Variation of "B". Have children in pairs. One gives the written or verbal directions the other follows them to the selected spot.

C D I A E C S

5. Tree Census
A. Identify the different trees on the Yard.
B. Have children make a census of types. Let each child or group look for a pasticular kind.
C. Record data
D. Make a graph showing the numbers of each kind.
E. Same type of activities as as above only with deciduous and non-deciduous trees.

C D I A E C S

(Reverse Side of Tree Census)
La R E S so s O
A. Make leaf prints of the identified trees.
B. Keep a height record of an individual tree over the school year.
C. Poetry on trees and music
D. Write own poetry about trees
E. Movement--Move like such and such a tree.

D. Cox (?)
1. Endangered Species
A. After discussion of endangered species (whales, pelicans, etc.) talk about some endangered speices of the yard--Bamboo in stack sack.
B. Have some children specualte on reasons for possible extinction and make an observational check list.
C. In pairs have children observe activity around bamboo for fifteen minute periods and record on checklist.
D. At end of day discuss observations--list in positive and negative. Draw

conclusions make crecmmendations to eliminate negative effects.
E. Watch periodically and discuss any chnages. DIAC ECS La R M S So O BCT
E. Don't know who made it
A. M Trees
A. Brainstorm with whole class on the word "tree"
B. Show film on "Trees"--then ask Kids for more words on trees--after an experience with the film (or pictures of trees) (my list DOUBLED)
C, Plant a tree--ask for more words--after actual experience with trees.
R D La S
B. Seeds
A. plant seeds
B. plant objects which won't grow, too i.e. chalk, crayons, candy.
F. Russell
1. A. Say "Angry!" Let children name things, places, people, whatever that relates to angry.
B. Select a word to express a feeling, i.e. angry, happy, sad, etc. Watch and observe differences in using facial expressions.
C. Use whole body to express an emotion.
D. Act out an emotion and have other guess the feeling or emotion
E. Write about an emotion--how do you feel, why you feel sad or happy, when do you feel sad, happy, etc.
F. Discussion on plants and animals--what feeling would they express if they could talk
G. Play different kinds of music and let children act out their feelings via movement.
H. Pretend and act out a plant or animal to observe and discuss feelings.
R DI A S La O H
2. Birds
A. Pretend you are a bird
B. What kind would you be?
C. Why would you want to be that bird?
D. Where would you live?
E. What would you eat?
F. Compare yourself with the bird you like least
G. Write about yourself.
D Y La

6. Lunch: People scattered, eating in different places.

7. Evaluation:
Schulz has had enough of leaving the classroom
Cox--money has run out anyway
Russell--likes having the cards, but feels like she's been out of class too much. After these sessions she feels better about the Yard.
Irish--Not enough time, in general, with so many projects going on--magic circle, project READ, etc. Cox Agreed. Irish would like to have no new projects next year so as to be able to get into existing ones. Regarding cards, can think them up, but hates having to put them together. Wished others would do that.
Shannon--Read last weeks discussion on litter parade
Schulz-- liked one-shot projects like flower planting best. But also liked litter parade--suggested individual classes thxm take that on now. Didn't like long-term projects with lasting commitment.
Skotheim--litter parade from now on will rotate from class to class.
Irish__ would like to see one big list of everyone's ideas for outdoors (rather than a stack of cards) for teachers to experiment with before cards are made.
Young--referred to Herb"s idea of attempting to integrate READ with
w

CARD MAKING - Valuing 3/3/76 P.85

WEY , gave example. People at first incredulous, but later not so much. Irish said not possible on all levels and Young conceded point, but said still the ideal. Cox concurred.

Skotheim--talked about coming Yardfest. Enthusiasm varied, but overall not really high.

8. Valuing Exercises

Overall, it was too long, even cut down to 1½ hours. The two sections still not properly divided, as values not coming out enough or at least no in such a way aas to make questions 10 and 11 possible to answer. Want to find out 1. teacher's values. 2. how they're communicated, 3. fwhich ones are relevant to EE and 4. how those can be conveyed using the Yard. The most successful exercise in this new list was #9, in which everyone prepared a math lesson and language arts lesson using the parking lot.

MATH LESSONS from Parking Lot

1. Measure the perimeter with giant steps, foot steps, rulers and trundle wheel and draw a map on graph paper.
2. Count the tire on cars or count cars and multiply by 4.
3. " " broken windows
4. " " ugly things
5. Do a dance---1-2-3-4
6. Measure the perimeter of the parking area
   Graph number of cars in lot each day
7. How many cars, what kind, compare size and speed of one to the other. How many miles per gallon for each? How much does each car cost? How much would fuel cost fo each?
8. How many cement blocks did it take to make the lot? Record in as many ways as you can—metrics, standard, graphs, charts, map. Measure various areas of different sizes. Find areas of each. Share and compare findings with a friend.
9. Add the license plate numbers. Add 1st and 2nd number and subtract 3rd.

LANGUAGE ARTS LESSONS from Parking Lot

11 Describe in poetry about cars: Color and shades, dirty, shape and design, what they do, story of who/what they carry, how they are born, how they will die, what their life was like.
2. Find fwords that mean "cat". How do you feel in this area, go by trees and describe what has changed.
3. Write a story as though you had parking lot space--what would you make out of it. Use wall as a cartoon area and to write/illustrate stories.
4. What words do plates make. Write story about how I would feel stuck in here all day if I was a car and of how I would solve problem of getting out and then what I would do.
5. nothing
6. Use letters on all license plates to make as many words as possible—use these words in writing a story or whatever.

SUMMARY: It was a heavy-duty day. Three of the nine participants were deeply involved in personal crises. By one in the afternoon everyone seemed ready to quit. There was a lot of joking, etc.

127

3/23/76

GROUND RULES: 1) Everyone participates. 2) No one detracts from flow of process by fooling around.

1. 5 minutes for discussion of rules, procedures, etc.

2. On other sheet, in column A (both sections) rank you items in order of importance to you--most important is #1. 3 MINUTES

3. Discussion--any agreement on first five priorities? either (or both)sections? How far down the list do differences occur? (Use blackboard to tally). Relationship, if any between priority rankings in both sections? 10 MINUTES

4. In column B (both sections) re-rank your list according to your priorities given an ideal teaching situation (optimum class size and limitless time, money and assistance) for the students. (add items if appropriate in either section and include in ranking in column B.) 5 MINUTES

5. On Yard map star those areas you think have the most teaching potential for your class. Then place a zero on those areas you consider to have the least potential. 2½ MINUTES

6. Discussion: Agreement, if any on good and bad teaching sites? Suggestions for physicla changes to increase or improve good teaching sites?--or to give non/teaching sites a teaching potential. 5 MINUTES

7. Are there alternatives ways of accomplishing items crossed out? 4 MINUTES

8. With existing limitations a Washington School, but given options for future planning cross out items in column A you would be willing to give up to help achieve situation in Column B (both sections). 3 MINUTES

9. An earthquake wiped out Washington School last night but the yard remains intact and the lessons must go on. a) Construct a lesson in Math for your class to follow today using only the yard facilities (indicate site of map). b) Repeat by assigning one other discipline (La., Sci., SoSt., H.,) to each teacher. Optional: list the tools the class would require; how would you adjust if there was only one pencil and 1 sheet of paper per class. 20 MINUTES

10. What do you really like to do with kids?. When was the last time you did it? 3 MINUTES

APPENDIX F

Pond Closure

1. Explanation

2. Cause of "pond problems"

3. Issues impeding resolution of problems

4. Final resolutions to "pond problems"

Pond Closure

The first note explains how it came about that WEY was forced to pump its ponds dry and leave them dry until rains filled them in January 1975.

The second note details a major issue regarding the relationship of the children to the ponds, namely, are they a part of the ecosystem or are they guests to it?

The third note records the current agreement with the City of Berkeley which makes the ponds permissible on an elementary school site.

The problem was caused by an unfortunate accident; but undoubtedly would have arisen sooner or later, whether because of an accident or because of a complaint from a local resident regarding its aesthetic qualities. The State of California has no policy on ponds on elementary school sites. So far as they know, WEY's is the only pond of its kind in California, and perhaps in the United States. We had hoped that the problem would have led to a policy being formed on the State level, but that has not happened. Thus the question of whether or not a pond may exist on an elementary school site is in the control of local administrators. This is unfortunate as local administrators do not have the time or incentive to adequately pursue the issue and come to a knowledgeable decision. We are hopeful that the State will someday establish a policy on the issue.

THE PONDS AND OUR PROBLEMS

Ellen Skotheim

City of Berkeley Public Health

Problem 1

Ms. Arnelle Smith, preschool teacher (Lil Owl Child Development Center, 2716 Grove Street), stepped into the north pond in order to rescue a 3-year-old student, Luke Grinage. She has filed a complaint with the Department of Public Health, City of Berkeley. Therefore they had to look into the complaint.

Legal Entanglement

Problem 2

Ms. Arnelle Smith, teacher, is filing suit against the Berkeley Unified School District. She is suing for "pain and suffering" and that the 130,000 coliform count[1] in the pond has aggravated her asthma condition. The District's insurance company (Travelers Insurance Company, 970 Broadway, Oakland) will be responsible for the legal goings-on.

School District

Problem 3

John Roda is the head of maintenance for BUSD. He is very frightened of water and drowning.[2] Complaints concerning the ponds eventually end up in his office.

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[1]One hundred thirty thousand coliform bacteria most probably # per 100 ml.

[2]From childhood experiences.

From Don Young

To TEST

Re. Otis Wong, Public Health, 9/29/75

On Sept. 29, 1975 from 11am to 12:15 pm Ellen and I met with Mr. Otis Wong, Sanitation Engineer for Dept. of Public Health, Berkeley. He was directed by Mr. Lynch to work with us in producing a proposal re. our ponds.

Dr. Foord, Acting Director of Pub. Health, Berkeley, placed the ponds in the category of "Water Contact Sport" area because 1. children during the school year had been observed in the ponds and 2. because of Robin's article in the School Review of the U. of Chicogo.

To get the decision changed, Mr. Wong wants a clear statement of the purpose of the pond. Are the children a part of the eco-system, or are they guests to it? We informed him the ponds were to be ecologically sound and that the children were not part of their ecosystem. The children would use the pond for academic study, and for aesthetic interest. The important point is that it not be neeessary that students make contact with the ponds. We asked about getting their hands in it for study purposes, and that was said to be o.k.

On the assumption that it not be necessary that children get into the pond, he wants the following done:

1. A fence on the north side of the dirt area 4'6" tall closing off the pond area.
2. A latch 48" up permitting passage to those who can reach it.
3. Rocks and vegetation around the perimeter of the pond separating land from water and making border visually distinct and less penetrable. He suggested we look at the Japanese Garden pond at Golden Gate Park.

One and two are city regulations for swimming pools. Number three is their personal recommendation.

The bottom of the pond is not critical if it is not a water-contact sport area.

Mr. Wond reiterated there is no code, procedure or anything for city of Berkeley, or to his knowledge for the state on our kind of pond. It is unique because it is on an elementary school site.

Finally, the proposal should specify the following:

1. goals for use of pond
2. purposes of pond
3. the end product desired and how it will be implemented (educational use).
4. safety and health measures and progress to date
5. maintenance mechanism into future--how it will be cared for.

POST SCRIPT: Seems we are going to try to get around putting in a fence by improving the bottom of the pond and by erecting natural barriers around the pond. Posts in the pond, around its perimeter and other measures were discussed by Mary, Ellen and I.

3/11/76
Rev. 3/10/76

UPDATE OF STATUS: ENVIRONMENTAL LEARNING PUDDLES

Two large Environmental Learning Puddles are located within the natural resources area of the Washington Environmental Yard (WEY). The south puddle is irregular in shape with a diameter of approximately 38' and a circumference of approximately 120'.

The north puddle is also irregular in shape, having a diameter of approximately 50' and a circumference of approximately 200'. It is the primary learning station, and is designed to support a diversity of aquatic life (fish, newts, insects, plants) both within the water area and on the moist edges in the immediate vicinity (i.e. plants, frogs, insects).

Both puddles have a maximum depth of 18". The water surface area of the south puddle is approximately 900 sq. ft. and that of the north puddle is approximately 1600 sq. ft. The average depth of the south puddle is approximately 8", and that of the north puddle, 6". The bottom surface of both puddles is naturally occuring adobe clay.

The water flows from one puddle to the other through a closed system. The amount of water in the puddles can thus be regulated and used to control the life in the pond and help establish ecological balance.

Purpose and Use of Environmental Learning Puddles Area

The natural resource study area is designed to bring to urban children experiences otherwise not available, through direct participation in studies of land and aquatic systems. The natural resource study area, as part of WEY contributes to a site where school and community can grow and interact in a socially congenial, natural setting.

The natural resource study area further provides a study and research resource for Washington School teachers in curriculum development and implementation. Extended use to other teachers in the Berkeley school system is encouraged.

The puddle area is a non-water contact learning place, and as such is managed to insure a source for maximum learning, providing a living laboratory demonstrating cycles (air, water, nitrogen, carbon-dioxide), seasonal changes, growth, evolution and adaptation, through a diversity of plant and water communities that support vegetative, animal and insect life. Management for these purposes includes selection and controls determined by health and sanitation standards, and classroom requirements for group and individual use. The natural growth of the various communities is encouraged to implement the learning potential throughout the school curriculum.

The puddle area will make available the following kinds of lessons:

1. Children learn about natural land and aquatic systems by direct observation of the ecological relationships.
2. Children are exposed to a threshold experience with the natural world by direct contact with living organisms in a specialized community.
3. Children learn and practice social and human values as related to a total environment.
4. Children learn about and practice the responsibilities that people have in relation to their natural environment.
5. Children's experiences are assured of a continuity and repetition not provided in any other ecological program.

Safety and Health Measures Provided for Environmental Learning Puddles Area

The ponds' perimeters will be strongly defined visually, and as non-water contact areas, will be made inaccessible to water-contact play (keeping in mind the educational purposes of the ponds). This will be done by lining the perimeter of the pond with boulders and aquatic plants. Further the ponds will have around their perimeter, about 18" in from the water line, eucalyptus "piles" or stakes, sunk into the ponds. If any child does happen to go into the pond, he/she will have them as a secondary barrier and as something to grab onto. They will be about 18" apart.

The depth of the ponds will not exceed 18" at any point, and both ponds will have a depth gauge permanently emplaced at the deepest point.

Pictorial warning signs directed to the pre-school age children will be erected, warning against getting into the water, drinking the water, and damaging the plant or animal life. A 4' 6" fence with a latch at the height of 4'6" will enclose the natural resource area and prevent easy access to the pond. The fence will be constructed of wood and wire mesh.

Maintenance Mechanism of Environmental Learning Puddles Area

Water quality will be monitored by Dr. Robert Cooper (U.C. Dept. of Public Health) beginning in January, 1976. Extensive bacterial tests will be conducted and these tests will be followed by a sanitary survey to establish appropriate safe coliform levels. Management and maintenance of potential insect problems (i.e. mosquitoes) will be achieved through monitoring and appropriate measures under the direction of Dr. Richard Garcia (U.C. Dept. of Biological Control) with supplementary assistance from the California Mosquito Abatement Society. This is to offset any adverse conditions resulting from the puddle areas that are not fully flushed through the recirculation system.

Physical maintenance of pond area includes management and maintenance of plants, water quality, and animal and insect populations, as described in the health and safety section. Project WEY staff will maintain and operate pump and filters, aerating the puddles on an 8 hour on, 8 hr. off cycle. They will also remove excess debris from puddle bottom.

This work is expected to require one quarter time staff person. Project WEY staffing will be filled by combinations of school staff, U.C. students, community volunteers, recreation personnel, and special interest groups on both a flexible and scheduled basis, under the supervision of Dr. Herb Wong, Project WEY Director.

An estimated $200.00 will be required for the management and materials for the aquatic system. This money will be raised by independent funding, as follows:

1. Federal and state grants for an interim priod only or for special developments within the ELP area.
2. City Recreation Department
3. Berkeley Unified School District
4. Combination of City Recreation and Education departments
5. Combination of City Education/Recreation with U.C./other institutions of Higher Learning (Hayward, Antioch, West, Diablo, Contra Costa, Merritt, Laney)

For this fiscal year the puddles are being funded by a federal grant.

APPENDIX G

WEY Yardfest

1. Explanation

2. Yardfest Announcement to parents

3. Yardfest Announcement to teachers and staff

4. Appeal to community for help

5. An agenda for steering committee

6. A neighborhood street-closure request

WEY Yardfest

Every year since spring 1972 Washington School has held a festival on its Yard. The festival provides good publicity for WEY and gives the children some goal around which to center some of their EE activities.

In 1976, more than other years, an attempt was made to make the festival an "environmental" one. Children spent many weeks designing and making banners to hang from the school's walls, inventing "environmental" games, and making things to sell.

The festival is open to the general public and each year more vendors and buyers attend. It is the only festival of any kind within the neighborhood and is looked upon now as an annual event. Each year there is live music and food, games and spectacles.

March 22, 1976

WASHINGTON SCHOOL

PROJECT WASHINGTON ENVIRONMENTAL YARD

YARD FEST

MAY 8

Unless this is your child's first year here, you probably already know about Washington School's annual "YARDFEST", so named because it is a festival, and it takes place on Washington's Environmental Yard.

Washington School is the only school in Berkeley with an "environmental yard"—a playground becoming a place where children learn about the environment while they play. The Yard has two ponds connected by a stream and a cascade. (This year we have added a miniature sand beach along the stream.) There is an enclosed vegetable garden on which children have been working all year. And there are many different kinds of trees, shrubs and wildflowers planted all around one part of the yard.

The YARDFEST is a celebration of children—of the children who inhabit the yard and of those who are young-at-heart. So begin thinking about what you, your children, and your whole family and neighborhood can do. For $5.00 anyone may rent space on which to set a table or booth at which to sell, buy, exchange, entertain, teach, share, learn and in whatever creative way ypu can think of, have fun. It is a good opportunity to make money for your club, church, synagogue, or self, as all money received goes to you or yours.

Whatever you do, or don't do, be sure to set aside SATURDAY, MAY 8 from 10:00-3:00 pm for the YARDFEST.

If you would like to involve yourself at a more rewarding level by helping the school put together a program, by helping us advertise, or by lending us your particular skill or talent, please let us know on the accompanying form. We look forward to working together with you on MAY 8 or prior to that. We can always use help, especially from parents and neighbors. If you would like to rent a booth, please fill out the appropriate form and return it with your $5.00.

We are printing colored flyers advertising the YARDFEST which we would be happy to pass on to you for your friends or interested organizations. If you would like some, please indicate so on the form. There is no charge.

Thanks very much. We'll be sending you more information as MAY 8 approaches. Don't forget to set that day aside.

Sincerely,

School Community
Yard Fest Group

MEMO

From: Herb
To: Staff
Re: YARDFEST

Super Yard Fest

May 8

It's getting to be time for the annual YARDFEST again. Last year some classes made nearly one hundred dollers at booths of various kinds, selling food, and things the kids had made in class. Some classes received parent support and aid, the YARDFEST being something many parents can really relate to and are anxiously waiting to help materialize.

The YARDFEST is becoming one of Berkeley's best known annual events. Perhaps the major reason for the YARDFEST's increasing success is its unique orientation towards children.

In the past most of the participation of the children has centered around your classes. (Last year 15 classrooms took part, singly or jointly.) We would like to encourage each of you to participate again this year so that every child and every class is involved.

It's a lot of work, we know. And there may not be a whole lot in it for you, personally. Acknowledging this, we are grateful for your past strong support. On the positive side is the money your class can make, and the positive involvement your class can experience in preparing your booth, display or presentation as part of the total school/community project.

We, the project committee, are hoping to receive even more support from parents and the neighborhood this year, and encourage you to try to ease the burden on yourself by encouraging your parents to participate more, through your class. The project coordinating committee is also larger this year, and we will be happy to help you in whatever way we can. The PEET group is also ready to support you in your class' effort.

We would like to see our environmentalyeducation orientation come through more clearly in whatever creative, fun ways possible. Mr. Armour is now coordinating an effort to construct banners with an E.E. theme that will be flown at the YARDFEST. Please give us your ideas as well, as soon as possible. Thanks.

Project Coordinating Committee: Herb Wong, Etsuko Steimetz, Judy Boe, Robin Moore, Moe Richmond, Tom Armour, Mel Cox, Bob Irish, Angela Wong, Mary Jefferds, Ellen Skotheim, Don Young, Jeff Dwelle.

Help Wanted

I would like to help. I can do the following (i.e. secretarial, bookkeeping, public relations, carpentry, other skills, etc.):

I am generally free on the following days and times:

I can not donate my time, but I have the following tools which you may borrow (i.e. truck, sewing machine, carpentry tools, painting equipment, etc.) in preparing the yard:

I would like _____ flyers to distribute to _____

Name: _____

Address: _____

Phone: _____

Please let us know if you would like us to phone you in response to this note, and if so, when we should phone.

*** *** ***

TO RESERVE YARD SPACE FOR YARDFEST, SATURDAY, MAY 8, 1976 -

Cut off slip and send with
$3.00* donation payable to: Washington Environmental Yard Program
Mail to: Washington School, 2300 Grove St., Berkeley, Ca. 94704
Marked: "YARDFEST"
Deadline: Friday, April 30

Do you want space for -

☐ Arts and Crafts ☐ Flea Market ☐ Food Fair

☐ Public Service/Community Organization ☐ Other

*The $3.00 fee will go toward Washington School's Environmental Yard Project. All money you make at your yard space is yours. There will be a $3.00 cleaning deposit charged to each space on the day of the Fest, returned at the end of the day. Checks preferred.

Your Name: _____

Address: _____

Phone: _____

McKinley Street Residents

Important

WASHINGTON ELEMENTARY SCHOOL, on SATURDAY, MAY 8, is having its annual YARDFEST from 10:00am to 4:00pm. We, the school, need your permission to have the street closed at those places where it is closed on school days. We will use the space for volleyball and perhaps table tennis, chess, and whatever you, the residents suggest.

Activities will focus at the north end of the street and no loud, noisy activities will be concentrated on the south end. The loudest activity we plan anywhere on the street is volleyball.

On Tuesday, April 27, someone will come to your home between 5pm and 8pm to collect the signed stub of this announcement.

We hope that you will plan to come to the YARDFEST and meet your neighbors, have fun, and see the school's Environmental Yard at its best.

Enclosed is a handout on the YARDFEST.

.....tear off here.....

I understand that on Saturday, May 8, from 10am to 4pm Washington School requests permission to close McKinley Street as it does routinely during the school day. A 12-foot wide emergency lane is to be maintained at all times throughout the closure; residents abutting the closure will have pedestrian and vehicle access to their properties at all times; and the street and sidewalk area are to be cleaned of all debris and litter by the school at the end of the day.

I do give my permission: _____ (signature) _____ (address)

I DO not give my permission: _____ (signature) _____ (address)

I suggest the following as possible activities on the street: _____

_____

_____

YARDFEST AGENDA

March 15, 1976
11:45 am,
WEY Room (basement)

Herb Wong, Moe Richmond, Keiko Steimetz, Judy Boe, Tom Armour, Mel Cox, Ellen Skotheim, Robin Moore, Mary Jefferds, Don Young.

1. Additions/Revisions to agenda--everyone
2. Review of last year's Yardfest for good/bad aspects--everyone
3. New Educational focus--Herb
4. General philosophy of Yardfest--everyone
5. Public Relations--
6. Coordination of banners, entrance decorations and all Env.'al Art things--Armour
7. Timetable to Yardfest on May 8.
8. Allocation of assignments and discussion of degree of involvement

Checklist of items covered last year, from Moe's file:

a. Wash. School classes notified via mimeo
b. Community notified via flyer
c. Press and other external community notified via newsletter
d. Wash. School classes return booth/activity slips
e. community deadline for booth requests
   1. categories: public service, flea market, food, art, other
   2. collection and deposit of fees: filing fee: $5.00, cleaning deposit: $3.00
f. Fire permit and other permits obtained
g. Stage, demonstration area's materials obtained
h. Music and other entertainment obtained
i. P.A. System, garbage barrels, tables, etc. obtained
j. Spatial arrangement of booths/activities mapped out (Grove St. fence--Art and Crafts booths, under clock--flea market, parking lot--food fair, bars area--demonstrations and Env. Ed. stuff, structure--classroom projects and films.)
k. Yardfest Day: 9:00 begin orientation of booth holders, 9:30 set up booths, 10:00 open to public, 10:30 check on problems, 11:00 Env. Yard presentation, 3:30 clean up, and 4:00 refund cleaning deposits after inspection.

Other items to consider:

l. Will there be an animal farm?
m. Orientation sessions for guides, docents, and others.
n. School-wide presentation/activity
o. WEY-wide presentation/activity/display, etc.
p.
q.
r.
s.

etc.

APPENDIX H

Yard Inventory - a preliminary sample of a proposed booklet

To: Staff
Fm: PEET
Re: E.E. Curriculum/Yard Inventory

May 3, 1976

The following is one page of a booklet we are making which lists all plants currently existing on the Yard. Preceding it is an introduction to its contents and an explanation of its use. Please look at it and give whatever comments on its improvement you might have to Don.

It is our intention to inventory all plants, animals and objects on the Yard, and state their description and location on the Yard in the booklet. A subsequent booklet will list the possible uses of those items in curricular exercises.

W.E.Y. PLANT INVENTORY

Over one hundred and twenty species of plants exist on the Yard, from all parts of the world, and with a myriad uses.

Onathe following pages the common and botanical names of all these plants are listed alphabetically. Following the plans' common name, its botanical name is given, and following that its description and location on the Yard.

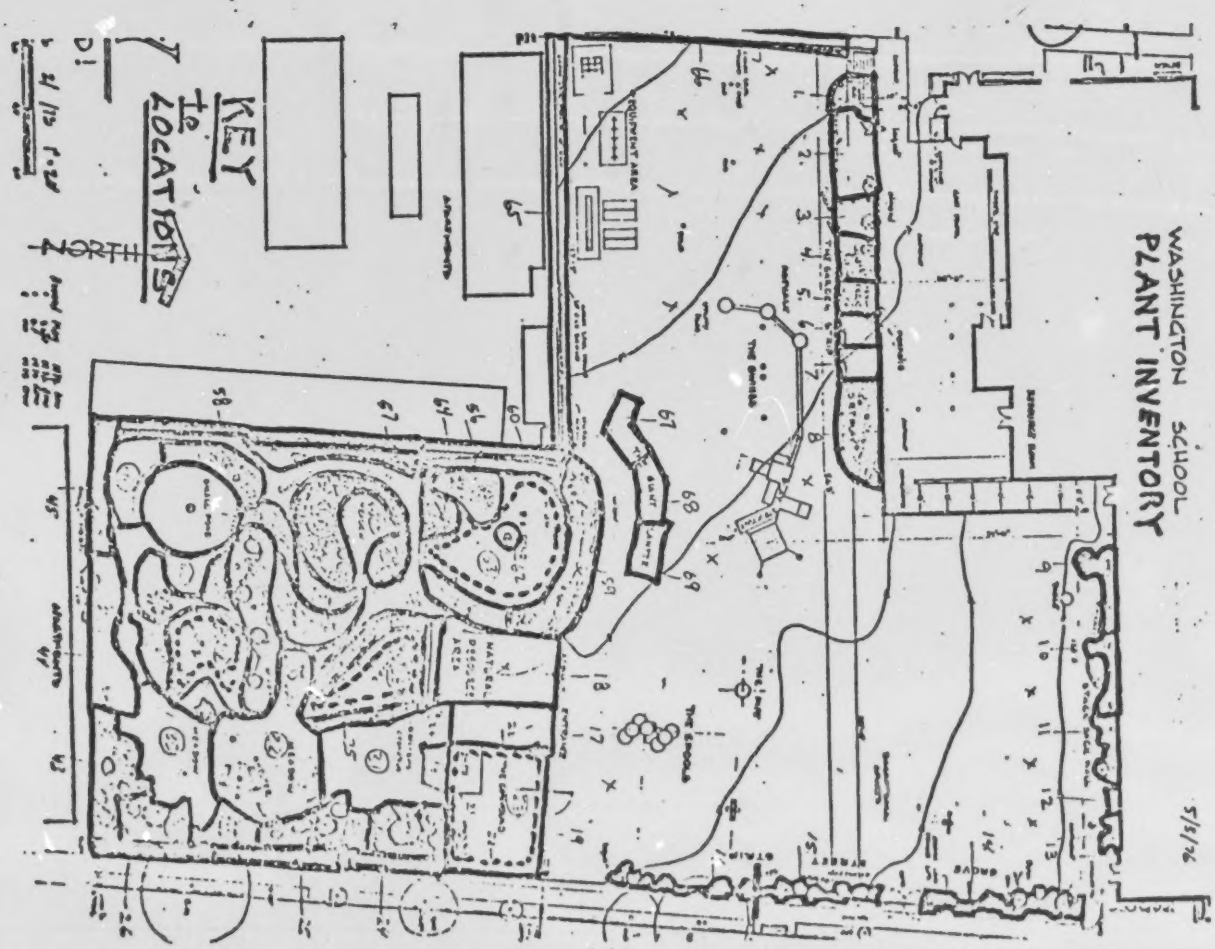
The plant is described as a tree, shrub, vine, perennial, grass or other annual, and by its general shape, its leaf, flower, fruit and seed.

The two most prominent locations are given, and those plants existing in a third location are further indicated with the word "elsewhere". Locations are specified as follows (for geographic locations, see accompanying map):

GARDEN STRIP:
1. compost area, 2. 1st garden, 3. 2nd garden, 4. 3rd garden, 5. mini-park, 6. 4th garden, 7. 5th garden, 8. dirt play area.
STACK SACK:
9. west end, 10. central area, 11. east end, 12. water fountain, 13. small stack sack.
EAST FENCE:
14. north end, 15. central area, 16 south end, (all both inside and outside fence).
ENTRY TO NATURAL RESOURCE AREA:
17. entry
NATURAL RESOURCE STUDY AREA:
18. study area
COMPOUND:
19. north fence, 20. east fence, 21. south fence, 22 west fence, 23. inside area.
EAST FENCE (NATURE AREA):
24. north third, 25. central third, 26. south third, 27. 1st corel (north end), 28. 2nd corel, 29. 3rd corel, 30. shelter.
MEADOW:
31. north end, 32. central area, 33. south end
CHAPARRAL:
34. north side, 35. east side, 36. n.w. side, 37. s.w. side, end 38. central area.
PINE HILL:
39. north side, 40. west side, 41. south side, 42. central area.

SOUTH FENCE:
43. west end, 44. central area, 45. east end.
SMALL POND:
46. south end, 47. west end, 48. east end.
REDWOOD GROVE:
49. Redwood grove
STREAM:
50. north end, 51. south end.
BEACH:MEADOW:
52. beach.meadow
BEACH:
53. beach.
AREA SOUTH OF BRIDGE WHERE WATER IS BROAD AND SHALLOW:
54. shallows
AREA NORTHWEST OF BRIDGE:
55. Penninsula
WEST FENCE:
56. north end, 57. central area, 58. south end.
POND PERIMETER:
59. north side, 60. west side, 61 east side.
POND (INSIDE)
62. island, 63. central area, 64. southwest area
SOUTH FENCE OF ASPHALT AREA:
65. south asphalt fence
WEST FENCE OF ASPHALT AREA:
66. west asphalt fence.
GIANT PLANTER:
67. west end, 68. central area, 69. east end.

Common/Botanical Name(s)	Botanical Name	Description	Location on Yard
Acacia, Bailey	Acacia baileyana	tree; feathery leaves; flowers yellow in in Jan. Feb.	E.Fence, central area
Acacia baileyana	see Acacia, Bailey		
Acacia, Black	Acacia melanoxylon	tree; leaves dk.green; flowers creamy-yellow, mar.-April.	E.Fence, south end StackSack, central area Elsewhere
Acacia melanoxylon	see Acacia, Black		
Acanthis mollis	see Bear's Breech		
Acer grandiflora	see Maple, Bigleaf		
Aesculus californica	see Buckeye, California		
African Daisey	see Daisey, African		
Agapanthus africanus	same	perennial; purple flower on 18" spike, year-round but mostly mid-summer to fall	E.Fence, north end. S.Fence, center
Agapanthus 'Peter Pan'	same	dwarf variety of Agapanthus africanus with same characteristics	E.Fence, north end.
Alder, White	Alnus rhombifolia	tree, deciduous; greenish-yellow male flower catkins; leaves coarsely toothed.	Lg.Pond, north end Sm.Pond, west end
Algerian Ivy	see Ivy, Algerian		
Allium sp.	see Onion, Wild		
Almond	Prunus	tree, deciduous; fruiting; flowers pink, two trees necessary for pollination	GardenStrip, 1st garden " " 2nd garden
Alnus rhombifolia	see Alder, White		
Alyssum spinosum	same	perennial shrublet; flowers white to pinkish; fragrant in short clusters.	S.Fence, east end Chaparral, central area Elsewhere
Amaryllis belladonna	see Belladonna Lily		
Anagallis arvensis	see Pimpernell, Red		
Anise	Pimpinella anisum	annual, tiny white flower on 2' stem in June. (Often confused with Fennel)	
Annuals	(All annuals on Yard would be sub-listed here by common name.)		
Apple	see Crabapple		
Arbutus unedo	see Strawberry tree		
Arctostaphylos sp.	see Manzanita		
Asclepias fasciculans	see Milkweed		
Aucuba, Japanese	Aucuba japonica	gold speckled, green leaves; shrub; flowers dk. maroon in March; bright red berries later.	E.Fence, north end.



APPENDIX I

Student Maps

1. Explanation

2. List of elements mapped by children

From: PEET
To Staff
Re: CHILDREN's DRAWINGS OF THE YARD June 1, 1976

The purpose of the following exercise is to help assess which element s/areas of the Yard have the greatest sensory impact on the children.

You should allow one full 45 minute period to complete the task. Each child should have a sheet of white paper;(a special type wich will be provided by PEET); space to work on the floor or at a desk; a soft, sharpened pencil or a fine line marker (erasers not necessary); and a shared supply of wax crayons. Children should not use rulers, (Specific accuracy is not necessary and there will be no time for rulers or corrections.) Please try to distribute the children as far apart as possible so that they don't copy from each other!

Ask the children to "make a drawing of the Yard....as they each see it in their minds, in their own way." Emphasize that "it doesn't matter how the drawing looks; it is not a test .... there is no right of wrong answer.... we just want their idea of what the Yard looks like.

Before they start each child should put their name, room number and teacher's name in the top left hand corner of the sheet.

Please try to leave enough time for each child to finish at their own pace, so we get complete products.

Don and Robin will come around to pick up the drawings from you, next Wednesday morning (9th June). We will bring the paper around this Wednesday.

Many Thanks.

Student Maps

All students in the school were given a sheet of white paper, 17x22 inches, and told to "make a picture of the Yard". The elements they mapped, and the percentage of children (divided by sex) who mapped them are as follows:

Element	Percentage		
	Total	Girl	Boy
Big pond	55	48	64
Equipment Area	48	57	41
Small pond	37	30	45
Structure	35	28	42
Creek/Beach	34	31	37
Sun	34	38	28
Trees and Bushes	32	36	26
Spool Structure	30	27	34
Children	30	27	34
Bridge	29	26	33
Pond Plants	27	28	25
Main Fence/Gate	26	22	31
Fountain	25	23	28
Plants	22	23	20
Eucalyptus Railings	22	23	20
School Building	21	21	22
Waterfall	20	17	23
Basketball Backboard	20	13	28
Main Garden	18	18	19

Element	Percentage Total	Girl	Boy
Hut	18	16	21
Island	18	13	23
Sky	16	21	10
Flowers	15	23	6
Fish	14	11	17
Dirt	13	14	12
Chaparral Hill	12	10	12
Grass	11	11	12
Clouds	10	9	10
Redwood Grove/Trees	10	9	11
Stock Sack	10	8	12
Pathways	10	10	10
Vegetables	9	8	9
Giant Planter	9	5	14
Hopscotch Area	8	7	9
Rocks Around Beach	8	5	11
Rocks/Weeping Willow	8	8	9
Chainlink Fence	7	5	9
Animal Shelter	7	6	9
Logs in Dirt Area	7	7	7
Compass/Mural/Banners	7	7	7
Grove Street Strip	6	3	9
Concrete Pipe Planter	6	5	8
Steel Pipe	6	3	10
Railroad Ties	6	7	5
Spool Tables in Dirt	6	5	8
Specific Dirt/Sand	6	5	7

Element	Percentage		
	Total	Girl	Boy
Swing Frame/Surrounds	5	5	6
Birds	5	3	7
Surrounding Houses	5	3	6
Insects/Animals	5	5	6
PG&E Boxes	5	5	4
Strip Garden	4	2	7
Utility Pole/Logs	4	3	5
Kickball/Soccer	4	2	7
Spool Table Tops	4	3	5
Corrals	4	3	6
Pump Housing	4	3	6
Pines	4	5	3
Rocks in Meadow	4	6	1
Teachers' Parking Lot	4	3	5
Asphalt	3	2	4
Adults	3	2	3
Rocks on Chaparral Hill	5	2	4
Big Rock	3	4	1
Bench	3	4	3
Animals	2	1	3
Trash Cans	2	3	0
Old Wheels on Chaparral Hill	2	1	3
WEY Greenhouse	2	2	2
Surrounding Streets/Traffic	2	2	2
Hoses/Water/Drinking Fountain	1	0	3

APPENDIX J

Student Questionnaire

1. Sample Copy

2. Transcript of responses

WASHINGTON ELEMENTARY U. C. LABORATORY SCHOOL

WASHINGTON ENVIRONMENTAL YARD STUDENT QUESTIONNAIRE

May, 1976

(Teacher's evaluation of student's standing relative to peers and teacher's evaluation of students' level of environmental awareness relative to peers. Could be answered in paragraph on back of page, or by circling 1, 2, 3, 4, 5 for very good, good, average, poor and very poor.)

Name _____ Teacher _____ Room ____

Age _____ Grade _____ Boy _____ Girl _____

1. Where is your favorite <u>place</u> to be on the Yard?

2. What is your favorite thing to <u>do</u> on the Yard?

3. How do you <u>feel</u> when you are in the Yard?

4. What <u>do</u> you like most about the Yard?

5. What <u>don't</u> you like about the Yard?

6. What would you like to see added to the Yard?

7. What would you like to see changed in the Yard?

8. Do you use the Yard after school? (Underline the right answer below.)

   Every day Most days Some Days Once in a while Never

9. Do you use the Yard on weekends? (Underline the right answer below.)

   Every weekend Most weekends Some weekends Once in a while

   Never

Student 5

STUDENT RESPONSES TO QUESTIONNAIRE by CLASSROOM beginning with the YOUNGEST CHILDREN

BJORGUM: Kindergarten; Boys: 12, Girls: 14, total: 26, Ranking: none

1. Where is your favorite place to be on the Yard?

bars (including monkey bars)--13
slide--7
pond--4
climbing structure--2
the pole--1
back yard--1

2. What is your favorite thing to do on the Yard?

play on slide--6
play by the pond--3
run around the paths by pond--1
catch fish--1
swing on climbing structure--1
run--2
jump rope--1
play with trucks from classroom-1
catch people--1
play basketball--1
play on bars--3, rings--1, poles--1=5
play in the pond--1
look at fish--1
jump over river--1
play on climbing structure--1
jump off giant planter--1
play hide and go seek--1
play monster--1
play--1

3. How do you feel when you are on the Yard?

good--12
happy--6
fine--8
neat--1

What do you like most about the Yard?

pond--7
slide--6
play--2
fish--1
trees--1
pretty--1
lots of room to run around and play--1
bars--6
trees--1
plants--2
butterflies--1
flowers--1
climbing structure--1
run--1

5. What don't you like about the Yard?

nothing--7
"Catching tadpoles because its sad to take them from their home."
"People getting the fish out of the water."
"The pond, because everyone catches the fish."
Bad people, fights, hitting--3
"People try to beat me up."
"When I fall."
"Dirt always gets into my shoes."
"The big round basketball hoops because the balls hit me."
bicycles on dirt and getting broken--1
the exit to the playground--1
"The big round thing."
"The bars, because I can't do it."

6. What would you like to see added to the Yard?

swings--6
to go down the pole and the slide-1
playhouse--2
clubhouse--1
more flowers--1
bigger slide--2
"Rope on the slide so you can push friends up."
nothing--3
little flower garden--1

more frogs and toads on pond--1
ducks--1
gate near the pond--1
bikes to play animals-1
more balls--1
things to pet and look at--1
Some more yard--1
a punching bag--1
place for toy and racing cars--1
swimming pool--1

7. What would you like to see changed in the Yard?

nothing--10
change bars to tunnel--1
change round bars to bars you change hands on--1
change bars to climbing structure--1
the slide pole--1
put toy people on the gate--1
change the logs--1
change the tire--/
bars--1
change bars to trampoline--1
bars that shake--1
the little slide--1
basketball courts--2
change cement--1
change the pond--1
"Take the sand away because people throw it in my eyes."

8. Do you use the yard after school? Every day--4, most days--1, some days--4, once in a while--6, never--11

9. Do you use the Yard on weekends? Every weekend--1, most weekends--3 some weekends--5, once in a while--0, never--17.

WOLTERS: Kindergarten; Boys: 10, Girls, 14, Total: 24, Ranking: group 1=4, group 2=11, group 3=5, group 4=2, group 5=2 where 1=very good.

1. Where is your favorite place to be on the Yard?

pond--16
bars--4,
dirt--1
water--1
stand in the sun--1
I don't know--1

2. What is your favorite thing to do on the Yard?

play on bars--6
hang on bars--2
float boats--2
Hopscotch--2
dirt--1
play with a ball--1
climb on bars--1
no response--3
fish in pond--2
play with hotwheels in dirt--1
slide--1
play games--1

How do you feel when you are on the Yard?

happy--21, no response--2, good--1

4. What do you like most about the Yard?

pond--7
stream--1
no response--4
its fun--1
spools--1
watching the river--1
bars--6
slide--2
play structure--1

5. What don't you like about the Yard?

no answer--4,
mud--3
ponds--1
bars--2
parking lot--1
tree house--1
the kids--1
I like everything--4
pond too messy--1
"I don't like to play in the ponds."
monkey bars--1
sitting--1
too many gates and wooden things--1
new spools--1

STUDENT RESPONSES... p.3

6. What would you like to see added to the Yard?

swings--9
trees--2
bushes--1
slide--1
see-saw--1
toy racing car--1
no answer--6
apple tree--1
grass--1
a spin-around--1
a little house--1
the library--1
chickens--1

7. What would you like to see changed in the Yard?

no answer--6
bars higher--1
no litter--4
more ponds--1
swings--1
mud--1
monkey bars--3
the bars--1
pond moved over by bars--1
pole you slide down--2
hopscotch changed--1
nothing9-1

8. Do you use the yard after school? everyday--1, most days--0, some days--1, once in a while--4, never--17, no answer--1

9. Do you use the Yard on weekends? every weekend--1, most weekends--2, some weekends--3, once in a while--7, never--9, no answer--1.

GOLDSTEIN: Kindergarten; Boys: 12, Girls: 15, Total: 27. Ranking: none. Ages: 5=15, 6=9, 7=2, not given=1.

1. Where is your favorite place to be on the yard?

pond--7
waterfall--1
bars--2
jungle jim--1
slide-pole--1
plants--1
baby chickens--1
"subs"--1
fountain--1
monkey bars--4
ring bars--1
slide--3
trees--2
whole yard--1
sand box--1
none--1

2. What is your favorite thing to do on the Yard?

run--4
bars--2
look at deep pond--1
in the garden--2
no response--2
skipping--1
make mudballs--1
play batman--1
play american army--1
short bars--2
watch kids at pond--1
catch fish--2
play--2
jumprope--2
slide--1
play house--1
play startrek--1
play lassie--1
go get a drink--1

3. How do you feel when you are in the Yard?

happy--10
mad--2
glad--1
feel like playing batman--1
sad--3
no response--2
sweaty and hot--1
fine--3
tired--1
having Mrs. Goldstein with me--1
feel like playing with lamont--1
good--2
bad--1

4. What do you like most on the Yard?

pond--4
jungle jim--1
fountain--1
slide--3
bars--1
basketball--2
monkey bars--1
garden--2

STUDENT RESPONSES... p.4

places where things to play on are--1
things to play on--1
Yardfest--1
play with the girls--1
"I don't like it."
people and friends--1
sandbox--1
run--1
where chickens are--1
things to climb up--1
tire swing--1
play--1
shelter--1

5. "hat don't you like about the Yard?

"I don't like big kids pushing me around"
"I don't like it when people beat me up."
"I don't like it when people say 'I'll beat you up if you don't give me your walkie talkie.'"
"I don't like to play with big kids."
"I don't like anyone coming by and hurting me."
"I don't like mean kids."
"I don't like people bothering me."
"I don't like people bothering children."
smelly garbage cans--1
the pond--1
the sun--1
slide--3
sliding pole--1
nothing--4
mud--1
clothes getting muddy--1
wet sand--2
sand--2
smells--1
animals--1

6. What would you like to see added to the Yard?

swings--6
gooses--1
Bay Crab--1
"I like it when Alex L. and Nicole make love."
popcorn before going home every day--1
cars--2
taller slide with curly "S"--1
see t.v.--1
a giant ball to climb on--1
long bridge across the pond--1
sculptures or other clay animals to feel along the path in the garden--1
fish--1
lions--1
"I would like snakes."
trucks--1
more bars--1
large fish--1
tigers--1
hot wheels--1
more plants--1
roof to climb on--1
snad castle--2
big playhouse with more than one room--1
chickens--2
rooster--1
"When big kids love. free lunch on yard--
"Do" sign--1
more slides--2
hose--1
another pond--1
the garden"--1

7. What would you like to see changed in the Yard?

nothing--8
change slide to robot station--2
"I wish there was an ocean in school."
change the dirt into grass--1
more animals--3
"I wish the xkids pole would turn into a chomic man.
"I wish there was a roof garden on top of the shelter."
more baby chicks--1
no response--2

8. Do you use the Yard after school? every day--3, most days--0, some days--7, once in a while--6, never--11

Do you use the yard on weekends? every weekend--1, most weekends--3, some weekends--6, once in a while--2, never--15.

HOULEHAN: Kindergarten (Mr. Houlehan did not have each child fill in a individual questionnaire, but had his whole class respond as a group. The following is their corporate answers, without numbers.)

Where is you favorite place to be on the Yard?

pond, climbing structure, bars, trees, cables, rocks, hills.

2. What is your favorite thing to do ont eh Yard?

climb cables, flip over bars, fish, walk in water, be in whole yard, rings, structure, slide.

How do you feel when you are in the yard?

happy, sometimes love, sometimes hate, feel good, feel free, mean.

4. What do you like most about the Yard?

run around the pond, hang upside down on bars, water fall, spool, basketball court.

What don't y u like about the yard?

"environmental yard", cables, fall into water, muddy, cement, pond, when bell rings, when people throw things in the pond,

6. What would you like to see added to the Yard?

cattle, rabbit, twist slide, play house, goldfish, swings, sandbox, swimming pool.

7. What would you like to see changed in the Yard?

clean water, take pond away, take cement away, take logs away.

8. Do yo? use the yard after school? 9--some days.

9. Do you use the yard on weekends? 9--some weekends.

GOLDSTON: Kindergarten and First Grade (K=11, 1st=15); Boys:13, Girls: 13 total: 26. Ages 5=4, 6=16, 7=5, 8=1. Ranking: none.

1. "here is your favorite place to be on the Yard?

pond--12	bars--5	spools--1	the middle--1
big hill where all the plants are--1			by greenhouse--1
drums--1	equipment area--1	climbing structure--1	
garden--1	front yard--1		

2. What is your favorite thing to do on the Yard?

play on bars--5	twirl on bars--2	catch fish--1	
watch tadpoles--1	look at pond--1	sit on spools--1	
play on spools--2	play on climbing structure--2		
basketball--w baseball--1	make team for playing--1		
play hide and seek--1	play cat and mouse--1		
play detective--1	play in sand--1	play boys chase girls--1	
go in hideouts--1			

3. How do you feel when you are in the Yard?

good--7	happy--6	fine--4	ok--1
nice--1	pretty good--1	no response--1	no good--1
"most times happy but sometimes sad"			
"sometimes good-sometimes bad"			
"happy and sometimes sad."			

4. What do you like most about the Yard?

bars--4	monkey bars--1	jumgle jim--1	being with somebody on bars--1
no response--3	friends--2	fun--2	
pond--2	fish--1	catch frogs--1	catch tadpoles--1

lots of activities--1		fun things to play--1	
just to play--1		structure--1	new spools--1
slide--1	basketball--1	not littered sommuch--1	scream--1

5. What don't you like about the Yard?

no--5	nothing--4	no swings--1	pond--1
when I fall and hurt myself--1		old spools shake--1	slide--1
not enough space for ball playing--1			
kids pushing--1		pushing and bumping into rocks--1	
big kids puching little kids into rocks--1			
"dumb kids who bother me"		when puched in sand--1	
"when people hurt me"		"when people start fighting"	
"when bigger kids beat me up"= "being hit by somebody"		people pushing	

6. What would you like to see added to the Yard?

swings--8	swings and tires on ropes--1		no response--3
more trees--2=	another slide--1	crooked slide--1	flowers--2
jungle bars--1	jungle jim--2	more climbing bars--1	
playhouse--2	trampoline--1	put new things in pond--1	
go-cart--1	merry-go-round--1	park--1	none--1

7. What would you like to see changed in the Yard?

nothing--5	pond bigger--1	clean litter out of pond--1	
change pond--1	change bars--1	monkey bars bigger--1	
fat bars should be skinnier--1		rules not to run on spools--people	
spools, door and thing to step up onto spools--1		fall and hurt themselves--1	
		more tree houses--1	
spools made into tower--1		big round house out--1	
cargo net on structure--1		big structure moved--1	
change structure into playhouse or hotel--1			less bushes--1
plants in different places--1		roses--1	basketball basket
change the tires with the sticks in the middle--1			lower--1
more tree houses--1			

8. Do you use the yard after school? everyday--0, most days--1, some days--4, once in a while--6, never--15.

9. Do you use the yard on weekends? every weekend--1, most weekends--0, some weekends--5, once in a while--7, never--13.

KEY: First Grade; Boys--12; Girls--13; Total: 25. Ages: 5=1, 6=16, 7=3, 8=1. Ranking: none.

1. "here is your favorite place to be on the Yard?

pond--10	waterfall--1	slide--3	rings--3
monkey bars--2	dirt--2	mud--1	no response--2
the chicks--2	the pole--1	under the trees--1	by the pine treee1

2. What is your favorite thing to do on the Yard?

play on the monkey bars--3		rings--1	poles--1
play on the pole--2		pond--2	catch fish--3
run--3	play army--2	play house--2	slide--2
play tag--2	play school--2	play on climbing structure--1	
play kittens--1		follow the leader--1	

STUDENT RESPONSES.... p.7

How do you feel when you are in the Yard?

happy --15 | good--7 | very good--1 | "filled with envy"
catching fish--good--1 | stuped--1 | "I strong"
"filled with energy"

4. What do you like most about the yard?

pond--9 | play in the water--1 | | waterfall--2
the fish--1 | monkey bars--4 | bars--2 | slide--5
trees--4 | dirt--3 | sand--1 | nothing--1

5. What don't you like about the yard?

mean kids--8 | cement--4 | hard cement--1 | nothing--4
t e bars--3 | monkey bars--1 | the slide--3 | rocks by pond--1
pond--1 | barrels--1 | everything--1

6. What would you like to see added to the yard?

swings--13 | swimming pool--2 | pool--1 | tunnel--1
tunnel under monkey bars--2 | another pole--2 | cement turned into..v1
s store--1 | "aggarden that noone can ruin with flowers. no response--1

7. What would you like to see changed in the yard?

take out rings--5 | | the monkey bars into s house--2
the bars--1 | s pool--3 | take out slike--1 | the slide--1
the climbing structure to go higher--2 | | | the fence--1
nothing--1 | no--1 | no response--1 | the ponds--1
ponds into clean ponds--1 | | some boards on the hut--1=
dirt--1 | cement to dirt--1 | the fence--1

8. Do you use the yard after school? Every day--4, most days--2, some days--3, once in s while--11, never--5.

Do you use the yard on weekends? every daekend--3, most weekends--0, some weekends--3, once in s while--2, never--15, no response--2.

COOPER: Grade one and grade two (Ms. Cooper did her session with the whole class together as did Mr. Houlehan, except she counted hands so she has numbers. First she did s few children individually, and then she asked the whole class how many agreed with he choises she offered, She had up to 29 students, but the precise number is not certain.)

1. Where is your favorite place to be on the yard?

the dirt yard--23, | the slide--4 | the spools--2

What is your favorite thing to do on the Yard?

tag--12 | bars--3 | basketball--1 | hide and go seek--1
red rover--11

3. How do you feel when you are in the Yard?
real good--1 | fantastic--2 | great--2, happy--2, good--2
"fonderber"--1 in between good and bad--1 | fine--1 | terrific--1
excellent--1 | "well o.k."--1

STUDENT RESPONSES.... p.8

4. What do you like most about the Yard?

the pond--4 | the slide--2 | dirt area--1 | hut--4
animals--1 | flowers--1 | meeting friends001 | barrels--1
bars--1

What don't you lkie about the Yard?

the steel pipe--7 | | sandbox--6 | big old fence--5
spools--3 | bars--2

What would you like to see added to the Yard?

more sculptures--7 | | bars--2 | swings--13
trees and flowers--4 | | animals--3 | things to climb on-1

7. What would you like to see changed in the yard?

monkey bars (no number given) | | the spools (no number given)

8. Do you use the yard after school? (some days circled and "average" written.)

9. Do you use the yard on weekends? (some days weekends circled and "average" written)

RUSSELL: Grade one and grade two: (17 and 12 stucents respectively)
Boys: 14; Girls: 15, Total: 29. Ages: 6=8, 7=16, 8=3, 9=2. Ranking: none.

1. Where is your favorite place to be on the Yard?

pond--11, | bars--9 | jungle jim--1 | slide--6
spools--1 | mud--1 | dirt pile--1

2. What is your favorite thing to do on the Yard?

slide--9 | climb bars--1 | swing on bars--1 | jungle jim--1
play on bars--3 | | run--1 | chase--1
play running game with friend--1 | | play on the pole--2 | play--2
play on spools--1 | | tag on spools--1 | swing--1
catch the fish in the pond and put them back in the water--1
jump rocks--1 | play with boats--1 | play on yard--1 | kickball--1

exsmples: "sometimes I like to go down the slide and play tag on the spools
"Jump over rocks and playing with boats in the waterfall."

3. How do you feel when you are on the Yard?

happy--13 | good--12 | glad--1 | loose--1
gay--1 | fine--1 | sometimes good and sometimes bad--1
"Kind of bad because the kids think its monkey place."
"Sometimes happy sometimes I feel sad."

4. What do you like most about the yard?
bars--9 | jungle jim--1 | slide--6 | pond--3
stream--1 | new spools--3 | playing in the mud around the pond--2
the pole--2 | lots of things to play--1 | | play--1
run--1 | play games on yard--1 | | jumping over logs--1
tiny animals--1 | | no response--1

STUDENT RESPONSES.... p.9

5. What don't you like about the yard?

pond--4	pond makes mud--1	mud--1	cartonsin pond--1
bars--3	no response--3	slide--1	sand0-1
logs lying in yard--could get hurt--1			concrete--1
fence--1	play structure--1	nothing--1	
"when I get beat up"			people throwing rocks
"when someone chases me for no reason"			--2
"when I am chased by someone I don't know"			
"when someone chases me"			
"people pulling me off the bars"			
"the boys who like to pick fights"			

6. What would you like to see added to the Yard?

swings--12	chickens--1	ducks--1	frogs in pond--2
animals--2	rope going up to the pole--2		no response--2
more trees--1	baseball field--1	roller coaster--1	bumper car--1
jungle jim--1	a fun house--1	smaller slide--1	merry-go-round--1
the rope--1	jumprope--1		

7. What would you like to see changed in the yard?

nothing--5	no response--1	pond--3	no mud around
the dirty pond--1		no mud--1	pond--1
the pond cleaner--1		drinking fountain--3	
logs--3	bars--2	wooden things on ground--1	
remove dirt pile--1		paint wood part on slide--1	
spools--1	sand box with wood around it--1		no garbage--1
structure--1	the pole--1		

8. Do you use the yard after school? every day--2, most days--0, some days--2, once in a while--9, never--15, no response--1.

9. Do you use the Yard on weekends? every weekend--2, most weekends--3 some weekends--3, once in a while--2, never--19.

HUSTON: Grade one (9 children), Grade two (11), grade three (4), not given--2 children. Boys: 12, Girls: 14, Total: 26, Ages: 6=4, 7=12, 8=7, 9=2, 10=1.

Where is your favorite place to be on the yard?

bars--8	dirt--5	pond--4	no response--4
nowhere--1	last year's spider web--1		slide--1
structure--1	around tunnel--1	hut--1	

2. What is your favorite thing to do on the yard?

bars--9	pond--3	fountain--1	wood sculpture--2
slide--2	play on hut--1	talk with frineds--2	
goofing off--1	play--1	kickball--1	basketball--1
"sit on a rock and think"		"play adventure games"	

3. How do you feel when you are in the Yard?

happy--10	good--8	bored--2	very happy--1
sometimes good and sometimes bad--2			

STUDENT RESPONSES:::. p.10

"I sort of feel bored without a friend to play with."
"like there is a jungle around."

4. What do you like most about the Yard?

pond--8	looks of the pond--1		waterfall--1
bars--6	dirt area--3	its big--2	its quiet--1
its big enough to run in--1		"its just fun"	plants--1
"I have a lot of friends in it."		slide--1	

5. What don't you like about the Yard?

fighting--2		nothing--5	spools--2
"people who hurt people"		slide pole--1	slide--1
"The people who get in another person's business."			dirt--1
"The big boys hitting me with the ball on my head."			trees--1
"When boys chasing me."		nasty people--1	litter--1
"people stirring up the mud."			bars--1
"I don't like the people to get the fishes."			
second lunch line--1		basketball court--1	never quiet--1

6. What would you like to see added to the Yard?

swings--10	more to structure--6		nothing--2
more spools--1	a swimming pool--1	a bigger pond--1	a see-saw--1
bat--1	ropes--1	ducks--1	peach tree--1
apple tree--1			

7. What would you like to see changed in the yard?

nothing--8	bars--2	jungle jim--1	less litter--2
chicken fights--2		the way children sound--1	
no mean eople--1		the pond--1	bigger pond--1
spools--1	the big round barrel--1		dragonflies--1
basketball nets--1		no running--1	the hut--1
the slide--1			

8. Do you use the yard after school? every day--0, most days--1, some days--3, once in a while--10, never--12

9. Do you use the yard on weekends? every weekend--1, most weekends--0, some weekends0-2, once in a while--9, never--14.

GOGGIO: Grade two; Boys--10, Girls--14; ages 6=1, 7=14, 8=7, 9=2, 10 Ranking: none.

1. Where is your favorite place to be on the yard?

bars--6,	muddy area--3	rings--1	pond--4
stream--2	catch fish--1	slide--3	spools--1
different places at different times--2			kickball field--1
under a nice cool tree--1		running--1	

2. What is your favorite think to do on the yard?

play around the pond--5		float things in stream--1	
stream--1	walk in the water--2		kickball--2
bars--2	rings--1	play on sand--1	baseball--1
run--1	new spools--1	play jacks--1	pick flowers--1
slide--1	play--1	play with friends--1	none--1

STUDENT RESPONSES.... p.11

3. How do you feel when you are in the yard?

happy--11	real happy--1	good--3	hot--2
free--1	fine--1	friendly--1	muddy--1
sometimes I like to be happy and sad"			
"sometimes I feel crazy."		"I don't know."	

4. What do you like most about the yard?

pond--4	waterfall--1	water--2	stream--1
animals--4	chickens--1	ducks--1	play--2
bars--2	it is friendly--1	I like to be friendly--1	
"what you put in the yard."		everything--1	the nice people--1
"I like the pretty trees."		nothing--1	

5. What don't you like about the yard?

rock throwing--3		the mean people--1	
"When I get pushed into the stream or pond."			
falling in the pond--1		the girls--2	nothing--4
pond--3	bars--1	where the bars are--1	
lots of things--1		the wooden....--1	swings--1
logs--1	none--1		

6. What would you like to see added to the yard?

swings--7=	swimming pool--5	racing car for boys--3	
baseball field--2		chickens--1	ducks--1
"saving can for boys"--1		bridge across pond--1	
slide--1	merry go round--1	army tank--1	no response--1

7. What would you like to see changed on the Yard?

clean pond--2	pond dried out--1	pond--1	fish--1
nothing--3	no bars--2	bars--1	the papers0-1
yard clean--1	garbage picked up--1		trees--2
swings--1	dirt pile--1	slide to merry go round--1	
wood on fence--1		all the painting--1	
baseball field--1		playhouse--1	
"pole so when you run you don't bump into the pole going across."			

8. Do you use the yard after school? every day--1, most days--0, some days--6, once in a while--7, never--8, no response--1.

9. Do you use the yard on weekends? every weekend--0, most weekends--0, some weekends--4, once in a while--5, never--13, no response--2

SKILL: Grades two (9 children), three (17); Boys--14, Girls--12, total: 26, Ages: 7=5, 8=9, 9=10, 10=2. Ranking: group one=6, group two=7, group 3=9, group 4=2, group 5=0, no ranking=2.

1. What is your favorite place to play on the yard?

Env. Yard (dirt area)--6		WEY--1,	ponds--5
waterfall--1	fountain--1	slide--4	bars--3
spools--1	hole in spools--1	kickball--1	basketball--1
yard--1	cement--1	everywhere--1	hut--1
structure--1	no response--1		

STUDENT RESPONSES..... P.12

2. What is your favorite thing to do on the yard?

play on bars--2		play on monkey bars--2=	
slide--1	run up slide--1	run down slide--1	watch boys play
watch soccer--2		play--3	player--1
play around--1	kickball--3	play with people--1	play with friends--1
"pretend to be in country where people that are playing kickball and are not up."		play in Environmental Yard--1	play in the WEY--1
"I like the environmental...."		jump down from top of structure--1	
structure--1	fishing--1	pond--1	watch birds--1
run--1	skip on ground--1	walk around--1	sit and think--1

3. How do you feel when you are in the Yard?

good--9	"good when I'm with my friends."		good sometimes--1
"I feel good at lunch recess because there are more children."			
great--1	happy--5	nice--1	strong--1
free--1	bored--1	silly--1	fine--1
tired when I run--1		"I feel my own self"	bad sometimes--1

What do you like most about the yard?

The ponds--3	the waterfall--3	playing in the second pond--1	
monkey bars--1	rings--1	WEY--1	The environmental..--1
"That its the only schoolyard with an environmental yard in Berkeley."			
slide--4	fun--3	plants--2=	big--1
beautiful--1	watching soccer--1	more room--1	playing--1
people--1	the instructor--1	nothing--1	fences--1
"The fact that I can do almost anything I want."			

5. What don't you like about the yard?

nothing--7	fighting--2	"the yelling mean kids"	
"Because people be knocking other people down."			dirty--2
The ponds are so dirty--2		"Its all messy--has a lot of writing on it and stuff."	ponds--2
people litter--1		"You get in trouble if you climb on high things."	getting hurt--1
"The sense"	"Only a slide for the little kids."		play structure--1
tires--1	monkey bars--1	pole--1	too crowded--1

6. What would you like to see added to the yard?

swings--6	tire swings--1	big kid's slide--1	twisting slide--1
a slide that goes up and down--1		cleaner--1	a nice blue
ponds cleaned out--1		fruit trees--1	lake--1
more trees--1	more plants--1	more flowers--1	climbing structure-2
wooden houses--1		barn--1	swimming pool--2
more things to play on--1		plants not stomped on--1	
more sand--1	more spools--1	merry go round--1	more balls--1
games--1	football--1	gate so people won't go in--1	
rope back on structure--1			

7. What would you like to see changed on the yard?

nothing--6	ponds--3	ponds cleaner and clearer--1	
not all that stuff in pond--1		pond--drain all the water--its too	
lots of fish--1		dirty--1	goldfish--1
stream to have narrower, deeper channel--1			take out spools--1

mean kids to nice kids--1 | fighting--1 | no more trash--1
dirt to cement with pond still there--1 | | the dogs--1
pole you slide down--1 | more trees--1 | more animals--1
put swings by bars and add more bars--1 | | a better slide--1
noise changed to quiet--1

8. Do you use the yard after school? every day--0, most days--0, some days--9, once in a while--14, never--4.

9. Do you use the yard on weekends? every ~~day~~ weekend--0, most weekends--1, some weekends--3, once in a while--11, never--10, no response--1

TRISH: Grade two (9 children), Grade three (18); Boys--17, Girls--10; Total: 27. Ages: 7=5, 8=10, 9=12. Ranking: none.

1. Where is your favorite place to be on the yard?

pond--5 | waterfall--3 | dirt area--5 | in back--1
environmental yard--1 | | big spools--3 | basketball court--2
under willow tree--2 | | on rock--1 | in meadow--1
by tree house (hut)--1 | | at bars--1 |

2. What is your favorite thing to do on the yard?

games--3 | games at spools--1 | play tag--1 | play with friends--1
talk--1 | start talks with friends--1 | | catch fish--1
catch fish and put them in river--1 | | | climb on structure-1
structure--1 | play on environmental yard--2 | | clean it up--2
kickball--2 | basketball--1 | run on paths--1 | slide--1
walk around--1 | sail boats--1 | swing on bars--1 | play motorcycles--1
"I don't know because each day I do something different and I ~~always~~ haven't chosen a favorite yet (I ususally do something different."
play--1 | watching and playing--1 |

3. How do you feel when you are in the Yard?

happy--6 | happy because I am there--1 | very, very happy--2
"Happy because I can do almost anything that I want to do."
"Happy that it's not that old football field that it used to be."
"Happy that I go to this school." | good--7
weird because (of) all the people--2 | bad--2
fun--2 | free--2 | great--1 | o.k.--1
different--1 | relaxed--1 | in between--1 | quiet--1
"I like it very much."

4. What do you like most about the Yard?

pond--8 | waterfall--2 | water area--1 | river--1
Environmental Yard--2 | | in the dirt--2 | natural area--1
natural--1 | slide--3 | spools--2 | trees--2
flowers--1 | paths--1 | fresh--1 | structure--1
like the woods--1 | | playing with friends--1 |
big--1 | space to play--1 |

5. What don't you like about the Yard?

trash--4 | litter--5 | pollution--1 | trash cans--1
fights--1 | mean people--1 | getting hit--1 | boys teasing--1

some of the people on it--1 | noise--2 | noisey people--1
soccer field--2 | bars area--1 | railroad ties--1
"the half of the yard with the slide" | | fences--1
getting clothes wet--1 | too many kids--1 | nothing--1
"I hat the nasty" | not good lunches--1 |

6. What would you like to see added to the yard?

animals--6 | rabbits--2 | fish--1 | raccoon--1
squirrels--1 | deer--1 | birds--1 | swing--4
swimming pool--3 | | trees--2 | flwoers--2
bigger gardens--1 | | plants--1 | playhouse--1
play equipment--2 | | more things to climb on--1 |
tubes you can climb thru with windows--1 | | | games--1
florescent lights--1 | | clear water--1 | more paths--1
"More little streams with bridges and trout for fishing." | | | tunnels in stock seat-1

7. what would you like to see changed in the yard?

nothing--4 | spools--1 | spools--might hurt you--1
spools changed to swings--1 | | bars should be where spools are--1
more spools on spools--1 | | monkey bars--2 | no trash--2
pond--1 | dirty water--1 | bridge--1 | nothing--1
trees--1 | garbage--1 | weeds out--1 | wider paths--1
round table--1 | people not catching fish--1 | pipe--1 | slide--1

8. Do you use the yard after school? every day--2, most days--1, some days--3, once in a while--11, never--10.

9. Do you use the yard on weekends? every weekend--0, most weekends--2, some weekends--3, once in a while--3, never--19.

SHANNON: Grade two (16), Grade three (9) (grade unknown--1) Boy: 12, Girls; 14, Total: 26. Ages 7=6, 8=9, 9=6, 10=2. no ranking.

1. Where is your favorite place to be on the yard?

ponds--14 | bars--5 | straight bars--1 | trees--1
dirt area--7 | jungle jim--1 | slide--2 | everything--1

2. What is your favorite thing to do on the yard?

slide--8 | catch fish--5 | look at fish--1 | catch frogs--2
catch ladybugs--1 | | play with friends--2 |
play with friends in dirt area--1 | | talk to friends--2 | play on bars--3
chicken fight on bars--1 | | play tag--2 | play in big
seesaw--2 | run--2 | play at structure-1 | spools--2
play on pole--1 | | look at trees--1 | look at things--1
play house--1 | play--1 | games--1 | play ball--1
jump rope--1 | go up high--1 | jumping posts--1 | play with boats--1
make a snowman--1 |

3. How do you feel when you are in the yard?

good--8 | very good--1 | very, very good--2 | really good--1
good in the sun--1 | | happy--7 | glad--2
no response--2 | nice--1 | nice when its warm--1 |

exciting--1 funny--1 loud--1 yucky when its cold--1

4. What do you like most about the yard?

ponds--7 waterfall--2 fish--2 slide--4
structure--1 dirt area--3 flowers--1 gardening and
the stuff--1 no response--1 ducks--1 planting--1
kids play with me--1 bars--1 the hill with flowers on it--1

5. What don't you like about the yard?

slide--3 mean boys in dirt area--2 kids teasing--1
yard teachers--1 "Always the same--no new things to
do like new games and things to play in." nothing to do--
need more stuff--1 pond--2 litter--2
sand--2 nothing--1 mud--1 trees--1
no swings--1 bars--1 noise--1 "the sudy"
not being able to catch fish--1 black by bars making it hot--1
"I like the pleet."

6. What would you like to see added to the yard?

swing--15 flowers--3 fish (more and bigger)--2
more slides--1 longerslide--1 seesaw--2 big structure--1
no response--1 more bars--1 nothing--1 trees--1
something cool when it gets hot--1 swimming pool--1 bigger place to play--1

7. What would you like to see changed in the yard?

no response--5 clean pond--5 get rid of slide--2 change the slide--2
nothing--2 longer grass--1 "those circi" everything to dirt-1
more animals--1 the bars--1 swings--1
the E.Y. gets shoes dirty get rid of sand--dogs "do" in it.--1
another kickball field--1 hopscotch repainted--1
fence near the garden--1 get rid of the litter--1

8. Do you use the yard after school? everyday--0, most days--0, some days--6, once in a while--10, never--10

9. Do you use the yard on weekends? every weekend--0, most weekends--0, some weekends--7, once in a while--3, never--16.

BOBCATS: Grade two (7 children), grade three (16); boys--12, girls--11; Total Total:23; Ages: 7=4, 8=8, 9=9, 10=1. Evaluation, none.

1. Where is your favorite place to be on the yard?

pond--5 waterfall--1 env. yard--3 dirt area--2
new spools--3 bars--2 basketball court--2 mud area--1
everywhere--1 in front, near doors--1 playground9-1
structure--1 no response--1

2. What is your favorite thing to do on the yard?

catch fish--4 basketball--3 go on spools--1 new spools--1
jump on spools--1 climbing--1 jump logs--1

jump off structure--1 jump fences--1 play--2
run around--1 run around pond area--1 sit and talk--1
tag--1 jacks--1 bars--1 hopscotch--1
wander with Laurel in mud area and talk--1
"Follow Jeffrey Orenstein except when wants to do something to the girls."

3. How do you feel when you are in the Yard?

good--9 happy--7 sometimes happy and sometimes not--1
o.k.--2 so-so--1 bored--1 great--1
refresheing--1 "depend on whether with someone or alone."

4. What do you like most about the yard?

pond--7 pond circulation--1 stream--1 fish--1
big--4 Env. Yard--2 dirt area--2 slide--1
no pushing or fighting--1 animals--1 space--1
scenery--1 plants--1 good things to play-on--1
don't know--1

5. What don't you like about the yard?

"Big kids push you out of the way." falling down--1
"When I don't get a chance to play." falling into pond--1
"Big kids that get angry at you." nothing--13 don't know--2
basketball courts--1 new spools--1 old, old spools--1
ground is hard--1 some fences that block the way--1
concrete pipe in middle--1 no swings--1 no big slide--1
no kickball field--1 not enough stuff--1 blacktop--1
snails--1 garbage--1 pond--shoes get wet--1

6. What would you like to see added to the yard?

swings--10 basketball nets--3 basketball courts--2
bigger garden area--1 animals to pet--1 sand--1
roller coaster--1 grass--1 boats for pond--1
geodesic dome kind of jungle jim--1 nothing--1

7. What would you like to see changed in the yard?

nothing--7 old spools out--1 spools three levels high--1
spools shaped like house--1 move spools--1 rings lower--1
ladder bars with bars only half way across--1
bars rings higher and ladders closer together--1 take out ponds--1
move fences around pond--1 bigger slide--2 bigger garden
move trees to dirt area--1 structure changed somehow--1
dwings rather than structure--1 bigger structure--1

8. Do you use the yard after school? every day--3, most days--3, some days--4, once in a while--5, never--8

9. Do you use the yard on weekends? every weekend--1, most weekends--2 some weekends--2, once in a while--7, never--11.

FUNK: Grade one (2 children), two (3), three (8), four (13). Boys: 12 Girls: 14, Total:26. Ages 7=3, 8=5, 9=9, 10=7, 11=2. Banking, none.

1. Where is your favorite place to be on the yard?

STUDENT RESPONSES..... p.17

env. yard--7	dirt--2	pond--4	by bridge--1
bars--2	monkey bars--1	wooden shelter--3	slide--2
kickball field--2		structure--1	no response--1

2. What is your favorite thing to do on the yard?

play kickball--5		play in kickball field--1	
play--5	run--4	jump--4	play tag--3
play games--3	catch fish--3	slide off wooden shelter's rook--2	
everything--1	slide--1	sit by waterfall and think--1	

"Sometimes when I'm not playing with Shawna, Mara I go and sit by the waterfall and think."

3. How do you feel when you are in the yard?

good--7	goodsometimes0-1	happy--6	very happy--1
free--2	fine--2	not sure--2	sometimes lazy--1
yard is all mine--1		energetic--1	nice and beautiful-1
I feel like its a great yard--1		alive--1	bored--1

4. What do you like most about the yard?

pond--2	water--2	waterfall--1	stream--1
fish--1	environmental--4	dirt--1	the ground part-1
structure--3	a free yard--1	nature--1	plants--1
flowers--1	nice~~111~~	pretty--1	slide--1
jumping logs--1		playing kickball--1	watching people
fun--1			play--1

5. What don't you like about the yard?

mud--4	dirt--2	pond--2	pond too dirty--1
too much water--1		cement--3	hard ground--1
no grass--1	litter--2	kids throwing rocks--1	bars--1
pushing and shoving--1		wood on yard--1	nothing--1
structure--1	pole on weed structure--1		no swings--1

6. What would you like to see added to the yard?

swings--8	animals--4	baseball field--3	sand--2
pools--1	a swimming pool--1	enclosed swimming pool--1	
twister slide--1		roller coaster--1	tunnel--1
sculpture--1	more to climb on--1	other things to play on--1	
anything--1	nothing--1	tires--1	taller bars--1

7. What would you like to see changed in the yard?

nothing--10	fill up big pond--1	fish in small pond--1	
move fountain closer to entrance--1			water--1
more fish--1	make pond cleaner--1		plants--2
tree--1	grass field--1	the sand--1	the hard ground-1
the logs--1	the ground--1	bars--1	sticks on ground-1
no response--1			

8. Do you use the yard after school? everyday--0, most days--4, some days--3, once in a shile--11, never--8.

9. Do you use the yard on weekends? ever weekend--0, most weekends--1, some weekends--3, once in a while--11, never--11.

STUDENT RESPONSES..... p.18

COX: Grade two (9 children), three (9), four (9). Boys: 15, Girls: 12; Total: 27. Ages 7=8, 8=8, 9=8, 10=5. Ranking: 1=12, 2=7, 3=3, 4=2, 5=0, unknown=1.

1. Where is your favorite place to be on the yard?

dirt--9	soccer field--3	basketball court--2	kickball--2
pond--3	redwoods--1	trees--2	cement--1
bars--1	none--1	"By the pond where the willow tree is."	
"The soccer football kickball a basketball field."			

2. What is your favorite thing to do on the yard?

soccer--8	kickball--1	basketball--1	play ball--1
"watch them play soccer--1		play horses--3	play--3
games--2	play with friends--1		play with Danielle--
talk--2=	sing--1	look at things--1	everything--1
run in yard--1	play tag--1	spools--1	

3. How do you feel when you are in the yard?

happy--10	"When I am in the yard I feel happy that Have so many things to do." "sometimes happy sometimes sad"		
"Happy and sometimes bored and sometimes not."			
"Happy sometimes and sometimes bored."			good--9
If its a good day I'd feel good."	nice--1		fine--2
"I feel nice and leave a nice warm feeling."			

4. What do you like most about the yard?

dirt area--7	"There is a dirt area and there are yard teachers."		
pond--7	stream--1	fish--1	animals--3
wildlife--1	grass--1	plants--1	everything--1
how it is--1	the play things--1	soccer field--1	"me"
you can play--1			

5. What don't you like about the yard?

nothing--8	mean people--2	"Some kids bother you a lot."	
people bother you--2		too many fights--1	"Martin"
the trash--4	asphalt--2	cement--1	fences--1
bats--1	The bugs and the bees."		the plants-1
The fence around the school."			

6. What would you like to see added to the yard?

swings--7	nothing--3	nothing much--1	a better soccer
a baseball field--1		water snakes--2	field--2
animals--2	more fish--1	more plants--2	more trees--1
more play things--2		rocks--1	swimming pool--1
a spot where there is all grass--1		more structures--1	more room--1
more dirt areas--1		no response--1	

7. What would you like to see changed in the yard?

nothing--11	no response--1	animals--2	spools--1
clean sand bags so they don't stink--2			teeter-totter--1
no more littering--2		move the sand--1	the cement--1
"the tube"--1	no fights--1	frogs--1	fewer kids on the yard--1

8. Do you use the yard after school? every day--1, most days--1, some days--4, once in a while--11, never--10.

9. Do you use the yard on weekends? every weekend--0, most weekends--0, some weekends--3, once in a while--11, never--4.

KONG: Grade two (4), three (6), four (17). Boys: 8, Girls: 19, Total: 27.
Ages: 7=2, 8=4. 9=11, 10=10. Ranking: none

1. What is your favorite place to be on the yard?

nature area--8	dirt area--3	env. yard--1	s.e. corner of
nature area under some trees--1		pond--5	nature area--1
stream--1	basketball courts--3	bars--2	soccer field--1
compound--2	little house--1	stack sack--1	

2. What is your favorite thing to do on the yard?

tag--9	soccer--6	kickball--1	jump over stream--3
play in water in stream--1		look at pond--1	walk with a friend-1
talk with a friend in sunshine--1		play with my friend--1	
walk around--1	explore--1	catch insects--1	think--1
games--1	play on structure--1		play on stack sacks--1
kickball--1	trade baseball cards--1		

3. How do you feel when you are in the yard?

happy--5	very happy--1	good--4	very good--1
free--3	proud--2	nice--2	a lot to do--2
weird--1	tired--1	jumpy--1	relaxed--1
great--1	excited--1	"Like I'm in the hall"	
scarry (when someone gets hurt)		very, very pleasant--1	
running and jumping--1		being very quiet--1	

4. What do you like most about the Yard?

ponds--5	stream--1	nature--4	look at things
shade in nature area--1		dirt--2	in nature area--1
fish--2	lots to do--2	things to do--1	stack sack--1
bars--1	structure--1	soccer field--1	exciting--1
concrete and nature area big--1		exploring--1	frogs--1
"when you get bored it makes you happy"			garden--1
"ground where I plant my flowers"		nothing special--1	

5. What don't you like about the yard?

nothing--5	boys hitting girls0-1		fighting--1
girls teasing boys--1		sometimes rough--1	too many people--1
hard teachers--1		bars--2	horizontal ladder-1
basketball court's location (balls go on street)--1			basketball courts--1
no grass in soccer field--1		no swings--2	tube-essy to get
sometimes not enough room--1		litter--1	hurt--1
not enough animals--1		getting wet--1	cement places--1
stack sacks (people dish food in them)--1			tunnel tipped
logs lying around--1			over--1

6. What would you like to see added to the yard?

swings--8	soccer area--5	grass soccer field--1	

nothing--2	animals--2	rabbits--1	flowers--1
frogs--1	quiet places--1	resting/selling model sailboats--1	
twisty slide--1		trees to sit under for shade--1	
more shade--1	nets for basketball area--1		block off Mc-Kinley St.--1

a hut to be alone in once in a while

7. What would you like to see changed on the yard?

nothing-11	bars--3	bars to sunny places--1	
less concrete--2		cement to lawn--1	all cement--2
eat anyplace--2		more trees in asphalt area--1	
McKinley St. to grass--1		more and bigger stack sacks--1	
more mats around the structure--1			

8. Do you use the yard after school? every day--1, most days--6, some days--11. once in a while--8, never--1

9. Do you use the yard on weekends? every weekend--1, most weekends--0 some weekends--3 once in a while--13, never--9.

RODRIGUEZ/PERLIN: Grades two (1), three (13), four (13). Boys: 11, Girls: 16; total: 27. Ages 8=6, 9=11, 10=10.
Ranking: 1=1, 2=6, 3=15, 4=5, 5=0.

1. Where is your favorite place to be on the yard?

pond--12	bars--3	slide--3	no response--3
dirt area--2	spools--1	nowhere--1	where the flowers
"I like under the tree near the first pond."			are--1

2. What is your favorite thing to do on the yard?

catch fish--4	play kickball--3	watch kidkball--1	bars--3
walk around--3	play--3	rest--2	talk--2
play under candle tag--1		tag--1	play chase--1
play sardines--1		slide--1	structure--1
get dirty--1	sailing boats--1	sun--1	

3. How do you feel when you are in the yard?

happy--6	o.k.--5	bored--4	good--3
really good--1	regular--3	"I feel the same way every day."--2	
"very good but not so good."		free--1	relaxed--1
fresh--1	sad--1	fine--1	sick--1

4. What do you like most about the yard?

pond--8	water fountain--1	stream--1	sight of pond--1
sight of stream--1 trees--1		watch the guppies--1	nothing--6
dirt--6	structure--1	bars--1	big--1
play girls bhanse the boys--1		flowers--1	plants--1

5. What don't you like about the yard?

too much litter--5	garbage--1	boring--1
nothing to do--1	nothing ever happens--1	
not many things to do--1	"The big nothing area"	mud--3
"Its too muddy in the Envir mmental area."		too many kids--1

not enough room--1 the bars--2 nothing--2
"The way you messed up the yard." you cant keep the fish--1
cement--1 splinters from structure--1 stack sack--1
fighting--1 spools--1

6. What would you like to see added to the yard?

swings--13, swimming pool--4 more structures--1 more things to
more spools--1 more things to do--1 play on--1
more climbing bars--1 more trees--2 bigger slide--1
slide--1 baseball field--2 horses--2 picnic area--2
ice skating rink--1 large edible fish in pond--1
grass--1 tetherball--1 nothing--1
"nothing--its too crowded already."

7. What would you like to see changed in the yard?

nothing--3 bars--3 the yard is not clean--1
to be clean--2 pond less muddy--1 the drinking fountain--2
cement changed to dirt--1= "The cement, make it like the other
hald of the yard." spools--2 the dirt--2
everything--1 all cement except kickball field--1 more things to do-1
not so many fences--1 basketball court--1 more pretty
have a picnic--1 "Miss Dukes" no answer--1 flowers--1

8. Do you use the yard after school? every day--0, most days--4, some days--2, once in a while--10, never--11.

9. Do you use the yard on weekends? Every weekend--0, most weekends--0, some weekends--0, once in a while--8, never--19.

160

APPENDIX K

Environmental Alphabet

1. Sample forms

2. List of all words mentioned by a 1st - 4th grade class

3. List of "Object", "Feeling", and "Action" words mentioned at least nine times

From Herb
To Staff

Re.: The Environmental Alphabet

( ) Fourteen sheets of exterior quality hardboard, properly primed to effect long-term preservation; cut in half gives 4'0" x 4'0" sheets. Each class/group works on one or more sheets in terms of general environmental ideas below. Finished "letters" can be fixed in different places--permanently or as a changable away....

"Yard Alphabet" Ideas

A buffet of ideas dealing with things, actions and feelings reflecting WEY which may be depicted in some way . The following are some "Yard Alphabet" ideas.

	THINGS	ACTIONS	FEELINGS
A	aphid, asphalt, algae antenna	adapt	
B	beetle, butterfly, berry, bark	build, balance, bore	
C	composte cabbage, caterpillar, compass	cycle, change, climb	caring
D	dirt, dandelion diversity	dig, discover, divide	
E	egg, energy	explore	excited
F	flowers, fish, fern, fir, fur, fruit, fungus	float fence, fly, fertilize	
G	grass, gull, gall, gravity	grow	
(	hill, heat, hedge, holes		happy
	hummingbird, habitat	hide, harvest, hunt	humorous
I	inside, insect, ideas	invent, imagine, interact	interested
J	jazz, jasmine	jump	
K	killdeer, kill	kick	
L	ladybug, litter, layer, log, lettuce, larva, leaf	leap, litter	love
M	mud, mushroom, metric meter, mound	map, mix, move	moody
N	nest, nut	net	numb
O	opening, organism	open, organism observe	
P	pillbug, pet, pond, pine pupa, pod, patterns	plant, peek, play	
Q	quake, quill		quiet
R	rocks, robin, rings, round, roots	recycle, return	relaxed
S	system, slug, seed, soil, stump, swallow, sand, sparrow, spider	search, swing, slide, shovel	sad
T	tree, tool, triangle	touch, tag	tasty
U	up	unite	
V	vine, vane, vegetable		
W	web, winter, willow, wind(y), wing, worm	WEY, weigh, wilt	wary
..	xylem, xanthin		
Y	Yard, yellow		
Z	zero, zone,		zany

Yard. Related Words - Objects ~ Feelings ~ Actions

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W

X

Y

Z

ENVIRONMENTAL ALPHABET-- Angela Wong's Class

Objects		Feelings		Actions	
aphids--	9	active--	3	action--	1
animals	7	airy	1		
ants	6				
algae	6				
air	1				
apples	1				
asphalt	1				
allergy	1				
bug	11	big	1	build	3
bird	10	beautiful	1	bump	1
butterfly	7				
beetle	4				
bull	2				
bridge	2				
bloodworms	2				
bee	1				
banana slug	1				
bars	1				
bush	1				
branch	1				
ball	1				
building	1				
bard (?)	1				
caterpillars	7	clean	1	catch	3
cows	6	cold	1		
cattails	4	crazy	1		
cyclops	4				
compost	3				
cats	2				
clover	2				
creeks	2				
crickets	2				
color	1				
children	1				
camp	1				
carrots	1				
creatures	1				
dirt	9	different	1	dig	2
ditch-	6	damp	1	dramatize	1
daphnia	6	dead	1		
dandilion	2				
cowden	1				
daisies	1	(no response--3)			
detritus	1				
deadleaves	1				
dog	1				
eggs	4	eager	1	eat	4
environment	3	enjoy	1	exiting	2
ecology	3	exotic	1	exit	1
eagle	1	excited	1	existing	1
energy	1			exercise	1

Objects		Feelings		Actions	
enclosure	1			eating	1
earthworm	1	other: environmental			
everybody	1	(no response: 3)			
frogs	10	feelings	2	fight	2
fish	9	fun	2	fast	1
flower	5	far out	1	find	1
friends	2	frightening	1		
fence	12	fast	1		
food	1	feel	1		
fall (season)	1				
grass	6	great	1	grow	3
garden	4	good=	1	games	1
guppy	4				
grasshoppers	3				
green	2	(no response:2)			
ground	2				
grassy	1				
garbage	1				
garden snakes	1				
grassy hill	1				
girl	1				
hydra	9	happy	5	hanging	1
hills	4	hot	2	hopscotch	1
horsehair worms	2			help	1
hay	1			hide	1
house	1				
hairy caterpillars	1	(no response: 2)			
hairy things	1				
hiding places	1				
insects	10	icy	1	(none)	
interesting things--2		indescribably fun-1		(no response: 6)	
infants	1	ick	1	others: information	
Italian Stone Pine--1		inviting	1	individual	
junk	11	jagged	1	joke	1
jackrabbit	1	jam		jumping	2
jumprope	1			jumpy	1
juniper	1	(no response: 5)			
jars	1				
junk	1				
kids	4	kicky	1	kicking	1
kickball field	12=	keen	12	kill	1
kite	3			killing	1
king snakes	1	(no response: 8)			
logs	3	like	1	look	2
land	3	lonely	1	laugh	2
ladybug	2	lovely	1	living	1
living things	1	loved	1	listen	1
life	1	likeable	1		

ENVIRONMENTAL ALPHABET--Wong, P.3.

objects		feelings		actions	
lake	1	lumpy	1	learn	1
lines	1			lunch	1
lily pad	1				
leaf	1				
light	1	(no response: 3)			
little bugs	1				
litter	1				
mud	3	muddy	2	maintain	1
milk	3	mucky	1		
meadow	2				
mosquitto	2				
moss	2				
mantis	2				
mouse	1				
metal	1				
men	1				
money	1				
monkey bars	1	(no response: 4)			
mayfly nymph	1				
mountains	1				
mushroom	1				
muscle	1				
nature	4	nibbley	2	noise	5
nest	2	nice	2		
nymph	2	nimble	1	(no response: 1)	
nails	1	neat	1		
nut	1	nice people	1		
needles	1				
ostracod	6	oily	1	out	1
open ground	5				
ox	1	(no response: 6)			
orange peels	1	others: pptional			
organs	1	orangish			
outside	1				
open space	1				
organism	1				
pond	10	pippy	1	play	4
plants	6	pushy	1	pick	2
pollywogs	4	picturesque	1		
plants	3	"pigs like Abe"	1	other: pollution	
people	2				
pink	1	park	1		
playground	1	pound	1		
pine trees	1	puddle	1		
queen bee	2	queer	5	question	2
quail	2	quiet	4	quarrel	1
quiet place	1				
quiet people	1	(no response: 7)			
~~run~~	~~1~~	rough	1	running	1
river	4	(no response: 3)		run	6
roster	1	Other: ~~xxxxx~~ round		running people	1
robin	1			ruin	1
raspberries	1				

objects		feelings		actions	
snake	9	still	1	smell	3
stream	5	shady	1	sound	2
structure	3	silky	1	shout	2
stone	2	sad	1	slid	1
snakl	2	stimulating	1	start	1
swing	1	stink	1		
sticks	1				
soil=	1				
slugs	1	(no response: 2)			
slide	1				
trees	9	terrific	2	talk	3
tadpoles	7	tough	1	throw	1
timber	2			taste	1
termites	1			turn	1
tubflex	1	(no response: 2)		trying	1
trail	1			tight	
ticks	1				
the people	1				
ugly	3	unhappy	1	use things	1
ugly people	1	uncomfortable	2		
uncemented	1	unquiet	1	(no response:11)	
underbrush	1	unusual	1		
		uninviting	1		
violet damselfly	3	very nice	1	vandalize	1
vestabules	1	very fun	1	violence	1
vegetable	1	very beautiful	1		
veg. garden	1			others: varieties	
vegetation	1	(no response: 10)		verdant	
viper	1				
water	11	windy	2	walk	3
weather	6	watery	1	work	2
wind	3	wild	1		
weed	2	wonderful	1	(no response: 5)	
washing machine	2				
waterfaal	1				
wood	1				
worms	1				
X-mas tree	1	X-strodinary		others: X-mas	
		X-quisite			
		X-massy		(no response: 21)	
Yard	9	yanky-like		yawn	
you	2	yucky			
youngsters	1			(no response: 11)	
zoo	1	zooy	1		
		zig-zaggy	1		
		zippy	1		
		zealous	1		
		zingy	1		
		zanoy	1		
		zesty	1		

"Objects" words mentioned in Environmental Alphabet at least nine times:

Item	No. of Occurrences	Item	No. of Occurrences
Dirt	37	Plants	15
Water	36	Zoo	14
Kids	35	Insects	14
Yard	34	Vine	13
Pond	33	Flowers	13
Trees	33	Vegetables	12
Animals	32	Person/People	12
Asphalt/Cement/Concrete	27	Xylem	11
Junk	25	Aphid	10
Rocks	22	Jumprope	10
Fish	20	Objects	10
Grass	18	Tadpole	10
Bird	17	Yard Teacher	9
Ball	16	Compost	9
Bugs	16	Fence	9
Mud	16	Hydra	9
Garden	15	Stream	9
Muddy	15	Snake	9

"Feeling" words used at least nine times:

Item	No. of Occurrences	Item	No. of Occurrences
Quiet	29	Happy	22
Nice	28	Fun	18

Item	No. of Occurrences	Item	No. of Occurrences
Dirty	15	Bad	10
Dumb	14	Bored	10
Incredible	12	Great	10
Kind	12	Interest (ed,ing)	10
Mad	12	Beautiful	9
Large	11	Good	9
Queer	11	Like	9

"Action" words used at least nine times:

Item	No. of Occurrences	Item	No. of Occurrences
Run(ning)	22	Accident	10
Jump(ing)	21	Beat up	10
Open(ing)	19	Quick(ly)	10
Eat(ing)	16	Hide (Hiding)	9
Play(ing)	15		

APPENDIX L

Transcript of tape-recordings with selected students playing on the Yard

Yard Tapes

Washington Environmental Yard: In-Situe Recordings, May-June 1968

Robin Moore

Rev #

000 Monday 10:20, May 3rd, Weather: bright with cool breeze

Spools

R. What are you playing?

006.5 Ss. We're playing chugga, chugga and planes and cars! . . subjects emit a variety of animated mechanical noises.

R. Do you play the game often?

Ss. No, this is our first time. We made it up.

R. How did you come to make it up?

Ss. Well, we were sitting an' getting bored so Lisa went schpewch fffwww, so I went fww, fww, fww, schpew, schpew, schpew, and we all went cheen, cheen and then we started making a game. . .

R. You're in Mrs. Cooper's class aren't you: Lisa and Shelley. Where do you usually play when you come out here?

Ss. Girls chase the boys.

R. Where does that happen?

Ss. Oh, around here and then we climb right up and no boys can get in here.

R. Why not?

Ss. Because it's so crampy, they can't get us, right in here. We stay in here between the two cable spools. And we hop up here and jump out and scare 'em a lot because we scare them a lot.

R. I see. Does that happen on the climbing structure over there, too?

Ss. Yea, yea. And when we get tired of them we just go chugga, chugga, chug, chug pschew.

171

R: What else do you do?

Ss: We play freeze tag.

R: Where?

033 Ss: Um, round here, and we play bottle of poison and bottle of mashed potatoes. Let's go and get those cooks now and see if we can get them to play a game. Hey, Jeffrey come here. He's recording! . . . You be it. . . I'll be it.

R: OK. Just show me how you usually play it.

Ss: Right. . . Bottle of mashed potatoes. . .

R: What are your two names, first of all.

Ss: My name's Read and he's Jeffrey, Mrs. Cooper.

Ss: Potatoe chips. . . do anything with P. Poppa, pop, potatoes. . . ha ha . . . hey, you got the bottle of poison.

R: And now they're chasing each other. One of them is frozen at the entrance of Nature Area.

END

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058 Monday, May 3rd, lunch-time recess, Warm, cloudless sky, at the middle corral (it had had an open roof constructed on it a few days previously)

R: My name is Robin, what's yours?

S: Bryan and Maria (Mr. Bjorgum's class) and Zack.

R: What are you doing here?

Ss: Playing. It's an Indian tent.

R: You play games here?

Ss: Yes, we play hand wrestler here. I go like this and like this.

R: How long has this Indian tent been here?

Ss: We made it yesterday.

R: Why do you like it?

Ss: I've got a clubhouse at my house, but it doesn't have these. . . it doesn't have a secret door.

END

090 ---

4th grade group of girls from Mrs. Wong's class sitting in bamboo having lunch.

R: Do you have lunch here every day?

Ss: Well, yea. . . on the warm days.

R: Why did you pick this particular spot?

Ss: It's pretty! Yes, it's pretty.
We like to be right by the pond.

R: Why do you like to be right by the pond?

Ss: I like it . . . it's nice. . . it's kind of cool on a hot day. . . I like being around the plants. . .

R: Do you ever have any boys in your group?

Ss: Nooo... 'cept when we eat over there.

R: Why?

Ss: Oh, I dunno. . . they're always playing soccer. . . They don't eat lunch. . . they take lunch after school. It's all they talk about. . . it's all they think about. They never share it. We played 'em the other day and scored one point. . . ha, ha. They scored about 50. . . They got knocked down and hurt.

R: What do you share?

Ss: Interesting things!

172

Ss: Some girls play soccer, but they don't play it every recess, maybe once a week or something. I think the only girl in our class that plays soccer is Shannon. . . uh, uh. . . I play, and Millie, and Lena, and Bobbette; Bobbette plays soccer, she's in the soccer team.

R: What things do you play?

Ss: We play tag a lot, back of the dirt area. We play running games a lot. They aren't always the same things that we play, though.

R: This is what you call the dirt area?

Ss: Yep. But it isn't really a dirt area. It's a nature area, or somethin.' But we call it the dirt area though. Because there's so much dirt. Because the plants grow in the soil.

The three rocks on the Chapparrel Hill, the group of two girls and a boy whom I had seen often playing there.

138 R: Do you always eat your lunch here?

S: Yea.

R: You spend quite a bit of time around here, don't you?

S: Yea.

R: What do you like about it?

S: Er, we're just making something around here.

R: What are you making?

S: A house.

R: Tell me about your house.

S: Naomi. . . your turn to say something (Vincent had done the talking till now).

R: Whose class are you in?

Ss: Miss Shannon's.

R: Which part of the house is it that you're working on?

S: The front.

R: Does it have different rooms?

S: Uhg, uh. . . (Sp)

R: Do you play with your house every day?

Ss: Yes, almost every time we come.

R: How long have you been doing it?

Ss: About. . . I don't know.

R: What are your names.

Ss: My name is Vincent. . . Naomi. . . We're trying to make a garden.

R: You have a garden at the back and this is the front? (Pieces of chaparrel, three small pieces of wood, three foxtails in a drinking straw = palm tree, a "table" made from aluminum foil, grass sprinkled around).

Ss: Uh, uh. We found another potato bug.

R: What do you do with the potato bug when you find 'em?

Ss: Put them in the garden.

He's right there in the bushes.

Ha, ha, ha. . .

That garden needs cleaning out, give it some dry dirt. Put some soil in the garden.

R: You are putting soil in the garden?

S: Listen, we call it soil, but its really dirt.

R: What's the difference between soil and dirt?

S: The soil is more lighter. . . soil is darker, I think. I dunno. . .

R: Do you think stuff will grow in that dirt?

S: We are going to put some stuff in there tomorrow.

R: Oh, what are you going to put in there?

S: Scarecrows and stuff like that. . .

---

208 Tuesday, May 4th, Overcast, slightly breezy, cool but not too cold, kids have jackets on. 9:55 a.m. recess.

Same two subjects (Vincent and Naomi, Shannon's class) at the three rocks on the chaparrel hill.

R: Hello, here I am again.

What have you got today?

S: Horses. We're making a barn. They both have a thing of water, so once they drink it all they can't have no more.

R: You have two little horses that you brought from home?

S: Hm, hmm...

R: And two places to drink water, made out of squashed up aluminum foil. Is it a "him" and a "her"?

S: Uh, uh, . . . We're digging up. . .

R: You're digging up the dirt with the legs of the horse.

S: With the face of the horse.

R: What's that?

S: A black rock.

R: A little black rock about a sixteenth of an inch in diameter. (Yesterday's garden, entrance flowers and so forth are thrown out and a new cycle begins. . .)

What's going to be here?

S: The horse's feet are going to get dirty.

R: Vincent is scraping away at the damp dirt between the rocks. Getting the horse's feet dirty. Standing him up to get a drink.

S: OK, let's use this wood to make a door.

R: What are you making now?

S: Going to make a door and a house for the horses.
But we're not going to leave them here or someone is going to take the horses.

R: Who brought the horses today?

S: Me (Vincent).

R: When did you think about bringing the horses?

S: Yesterday, I forgot them.
We've brought them before.

R: How many times.

S: Dunno.
He jumped, look. . .
Oh, man he fell.
OK, I gotit, neighhh..
He was running.

R: That's the end of your recess. . .

S: Yep.
Put them in there like that and put dirt over them.

R: Oh, I see. You're putting the horses in between the rocks and then cover them with dirt and leave them till next recess.

S: Nobody don't know they're there.
Now let's wreck up this, Naomi.

R: Why?

S: So they won't have a clue where they are.

---

275 Wednesday, May 5, Sunny, some cloud, breezy, coolish. Midday recess.
(At the sow thistle near animal shed. Two boys and a girl are searching for bugs in it.)

S: We're floating these things after we pick 'em.

R: In the little cardboard trays left from your lunches.
You've got a piece of cow thistle and a lady bug.

S: I think I've got about three lady bugs.
You can stay out here and wait for us and guard our lady bugs.

R: You have to have lunch now?

S: Yea, but we can eat outside.

R: Who's class are you in?

Ss: Mr. Irish's. . .
Here's another ladybug.
Hey, look, I've found some yarn.

R: Have you done this kind of thing before?

S: No.
I get a new idea every day.

R: How did you get this idea?

S: I dunno. We just found some lady bugs. . .
And used them for a passenger.
We found a queen lady bug, too.

R: How did you know it was a queen?

S: It was bigger.
It was black with white spots.
No that, there's a longer one. It has only legs in the front.

Then the wachacallit one.

I see another one of the good species.

He found another specie.

Here, look it.

Get it.

He got away.

R: What does species mean?

S: Hmm, I dunno...

R: Why is it a good one?

S: Because it has spots.

We like to have variety in things.

I got mixed up. . .

R: These are flies?

S: Yea, ugly flies.

R: Don't you like flies?

S: No, they fly away.

(We've moved into the grass under the eucalyptus tree.)

S: Hey, let's go and look at that other bush where we found our first one.

Hey, let's all split up.

You look on the front of that bush and you go with Christopher to where. . .

No! I want to go by myself.

R: What have you found?

S: A green one with black spots.

R: Did you ever see one of those before?

S: No, I haven't.

R: What's it called?

S: I dunno. . .

A 'green bug'?

---

343 (We're at the crrek. Two black girls, whom I had noticed playing on the rocks with sand and water day after day.)

Ss: It's diet sugar.

R: It's diet sugar?

Ss: OK, it ain't diet sugar.

I took it off, I put some white sugar on there instead.

I hate diet sugar.

I don't even eat no diet sugar.

We're making rolls and pancakes.

And after a while we're going to make some statues.

We're going to make a safe.

R: A safe?

Ss: Yes, we put our rolls in there.

And I put some pebbles and sugar.

And we'll make some cinnamon. . .

(Using a small plastic bag, taking sand from the creek and emptying it out on one of the rocks)

R: Play like this every day?

Ss: Well, almost every day.

R: What are you going to do with that dump there?

Ss: Put it in my mouth and eat it up.

(Pretending to eat it)

R: What's it taste like?

Ss: Tastes like. . . rocks.

Tastes yucky.

S: (Interrupting boy)

You're stupid, eating that stuff.

S: (Girls)

I hate you. . .

(Boy)

I hate you. . .

(etc.)

S: She's kind of nervous today.

R: How come you're so nervous?

S: That boy keeps bugging me.

R: What's your names?

Ss: Wendy and Latonia.

R: Whose class?

Ss: Mrs. Goggio in bungalow A.

If you'll excuse me, I got to go to get some oil, to oil the plants. . .

---

422 (Three girls assembling vegetation on a rock by the shelter.)

R: Hello, what are you doing here?

S: I'm cooking. . . cooking a nice dinner.

Salads and a nice. . .

R: What are you cooking with?

S: Well, the girls are picking. . . these two are my nice sweet daughters, they're my picking girls.

R: And you're the mother?

S: Uh, uh.

Ss: Putting lots of salt on this dinner.

Stove is getting hotter, wow. . .

(Dandelion leaves, wildflower leaves. . . daisy petals, linum petals, a piece of one of the pine trees. . . "and some cherries," and some grass. . .)

S: "Oh god, it's prickery"

Don't get something so prickery, it might prick our mouths.

(And some fennel)

R: Why did you pick this one here?

S: Those are mints.

It smells so good. . .

R: What are the white petals (shasta daisy)?

S: These. . .these are ice cream dinners, but they're not real ice cream.

R: Who's class are you in?

Ss: Mr. Houlehan's, room 100.

R: (Now have some acanthus leaves)

Ss: That's a lot of lettuce girls,. . . just need all this. . . going to be a good salad dinner.

Put some more lemon (petals of dandelion).

These are called clover dinners. . .

R: Real clover.

S: Sand is the salt.

R: What are your names?

Ss: Sabrina, Nifen. . . I got two names (the leader)

Marina

Sara Flore

R: Have you done this before?

Ss: Yea, we did this a lot of times before.

Sometimes me and Dave even play 'cops and robbers.'

R: No, I mean making salads. Do you call it a game?

S: No, we just play it.

I dunno what it's called.

R: How often do you play it?

S: Well, I don't know

498 FINISH SIDE 1

---

000 (continuing) START SIDE 2

R: Mint tea. . .

Ss: Will you make some for me?

R: What's that you've got?

S: This is black licorice.

Can't you see I'm doing the cooking.

We're mixing it up.

R: What did you say. . .? "Let me smell your hands!"

S: They smell like licorice.

Well, it tastes great. . . like licorice a little bit.

Hey, get that stuff ready by twelve o'clock...

Can't you see I'm cooking.

Hey, you spreaded it all out. . .you're sposed to keep it in little piles. . .

Now get to work. . .

(Sabrina is a real boss-type . . . now they're mixing it with their hands, turning it over and mixing it up)

I hate that a lot, I really hate it.

177

R: What are the yellow flowers?

Ss: Oranges.

R: Petals of California poppy.

S: Right.

R: (Turning the mixture over and over, exploring it, feeling it, smelling it, looking at it.. .)

---

024 Back at the three rocks in the chaparrel hill.

R: What are you making today?

S: A house.

No, we're making a fire.

R: A fire. . .

S: A camping fire.

Get some grass. . .

Are you going to the store?

No, I think I'll stay at home.

R: What's the yellow?

S: Sunflower.

---

040 Friday, 7 May, mid-morning recess, bright sunny and warm. By big pond.

S: I got fish in here. . .

I see a biggy. . .

Darn it.

He caught this big giant one. . .

R: Are they easy to catch?

S: No.

---

056 Noontime recess (Girls playing with horses in long grass behind shelter.)

R: Do you just play here with the horses?

Ss: No, we play all over.

R: Whose horses are they?

S: They're both mine.

I let her play with mine.

Then she gave me one, but it's still at her house.

R: Whose class are you in?

Ss: 106, Mrs. Key.

Faith and Christine.

We're real sisters, but she lives away from me.

I got adopted to my old mother.

---

091 Giant Planter dirt place, five seven-year-olds

R: What are you guys playing?

Ss: Cars.

R: Come here every day?

Ss: I don't know, ask him. I sure don't know.

R: Why is it a good place to play cars here?

Ss: It's got dirt, where you can pretend its like exploding.

It's much more better.

It's not wet.

It has lots of hills.

Lots of dirt. . . smoky dirt.

And its' long.

R: You all in the same class?

Ss: No.

R: Who's class are you in?

Ss: Bungalow A (Goggio). Michael Harms

I got transferred. (Russell) Joe.

(Mrs. Douglass) Eric.

(They have a plastic bag, fill it with dust and empty it out to make a dust storm/explosion. They dump all the cars in the hollow on top of one of the mounds, then empty the bag on the top.)

---

124 Chaparrel Rocks (Vincent and Naomi)

R: What are you doing today?

Ss: Everything.

We're going camping.

We're going to camp here tonight.

(They brought a packet of plastic spoons.)

R: What are you making? (Naomi)

S: A hole, in the dirt, under the rock.

R: What's your name?

S: Shanti (red-haired girl).

R: You're making the garden again.

S: Yes, because someone kept knocking it down.

---

143 Wednesday, 12th May. Noontime recess, very hot day, 85°+.

Kids are making remarks about how hot it is and how they are going to find the shade.

At the big pond.

R: Mind if I interview you?

S: No.

S: Hi, I'm Maxine Eastwood.
And this is Chris Belio.
We're in Ms. Schultz's class and Mr. Irish's (207).

R: Don't you come playing in the pond much?

S: Yep. Maxy keeps flomping all over.

R: Do you get into trouble with your parents when you get your feet wet?

S: No, I don't. Once I fell in the pond and I went home and changed my clothes and my mom doesn't care.

R: What do you do in the pond?

Ss: Catch fish.
I didn't get any yet.

179

R: You catch anything else here, is there anything else living here?

Ss: We just catch fish but there's a frog living here.
We've seen it.
We've seen bumbly bees.
And birds. . . they come really fast and stop over the plants with motions like this.

---

180 R: You say there's a frog here?

S: Yes, I touched it and it went away into the bushes.

R: Seen anything else besides frogs in the pond?

S: There's mosquito fish.

R: Do you catch them?

S: Sometimes.

S: The frog jumped right out over there.
I hit him with a rock.

There's four of them.
There's a lot of them.
He was on a board, then he jumped over there into those reeds.
I see him.
There's a thousand of them.
See that little baby one.

210 (A kid showed me a milk carton filled with different stuff and said, "look at my man-made potion.)

212 Two kids walking with milk cartons of fish.

R: Where are you taking the fish?

Ss: To hide them.
We can't take them in our classroom.
I'm donating mine.
Let them breath. . . give 'em a little breathing space.
I've got eight fish now.
(They hid fish behind plants by the bike stand. Kids said Ms. Russell poured them down the drain last time.)

---

230 Thursday, 13 May, Noontime. Hot.
Girls playing on the rock circle.

R: What are you playing?

Ss: "Monster Catch".

R: What are the rules?

Ss: If the monster catches you, then you have to be "it."

R: How do you use these rocks here?

Ss: If you go on the ground then you can't catch them.
You have to keep going round and round.

If you're on the rocks you can be caught. If you're on the ground you can't be caught.

R: What's this place?

S: This is where the monster stays.

(All in the same class -- Ms. Key.)

---

255 Thursday, 3 June. Sunny and warm.

Chaparrel Rocks. Two girls and two boys digging in dirt.

(Ava, Ms. Goldston)

R: What are you doing?

S: Making an Indian project.

R: Did you ever do this before?

S: Yes, we did digging.

R: In the dirt, with a stick?

S: Yes.

R: Where's the best place to dig?

S: Over in the other yard, the place where there's some poles by the structure. . . the dirt place.

R: What are you working on?

Ss: We're making a tunnel.

R: What's the tunnel for?

S: Maybe for ants or something.

(I'm 7 and I'm 6-3/4 and I'm 7. We usually play together. Me and her were playing together and we saw him and him playing and we decided to play together.)

Creek

S: This stick is what we call "the winner," because we tried against a whole lot of other boats but it still won. Maybe tomorrow we can bring a piece of paper from the classroom, or something and stick it on here for the flag, for the winning post in our boat races.

R: That's the flag pole?

Ss: Yes, but we don't have a flag yet.

These are trees and grass (foxtails).

320 END

APPENDIX M

4th Grade Questionnaire

ENVIRONMENTAL YARD INTERPERSONAL ASSESSMENT

Directions: Put an "X" on each line for statements with which you agree.

My friends and kids

__ 1. I wish I had more time to spend with my friends out in the environmental yard.

__ 2. I wish I had less time to spend with my friends out in the environmental yard.

__ 3. I wish my friends out in the environmental yard would let me explore with them more.

__ 4. I wish my friends out in the environmental yard would let me explore with them less.

__ 5. I wish more kids in the environmental yard would let me be friendly.

__ 6. I wish fewer kids on the yard wanted me to be friendly.

__ 7. I wish my friends in other classes could be with me more often out in the environmental yard.

__ 8. I wish my friends in other classes could be with me less often out in the environmental yard.

__ 9. I wish there were more environmental yard rules.

__10. I wish there were fewer environmental yard rules.

__11. I wish more kids would help take care of the yard.

__12. I wish just a few kids would be responsible for the yard.

My Teacher

__ 1. I wish my teacher would let me spend more time out in the environmental yard.

__ 2. I wish my teacher would let me spend less time out in the environmental yard.

__ 3. I wish my teacher would let me decide more often whether to work in the room or out in the environmental yard.

__ 4. I wish my teacher would let me decide less often whether to work in the room or out in the environmental yard.

__ 5. I wish my teacher would tell me what to do more often out in the environmental yard.

__ 6. I wish my teacher would tell me what to do less often out in the environmental yard.

Toward the Environment

__ 1. I wish there were more natural areas out in the environmental yard.

__ 2. I wish there were more people-made areas out in the environmental yard.

__ 3. I wish there were more quiet areas out on the environmental yard.

__ 4. I wish there were more adults to help me learn out in the environmental yard.

__ 5. I wish there were less adults to help me learn out in the environmental yard.

__ 6. I wish there were more living things out in the environmental yard.

__ 7. I wish there were less living things out in the environmental yard.

APPENDIX N

4th Grade Mapping Exercise

Post-analysis of various 4th graders go and do not like to play at

by: Ellen Skolnick, Don Young

Ronsons

	Places they do like to play at	Places they don't like to play at
1.	Stock Sack	
	* walk along edges with friends	stinks (kids pee in tunnel)
	run into bathroom when girls chase	too small to run around in
	go through tunnels	gets too hot
	play house in tunnels	ugly
	play army	too close to office
	just kind of like it	kickball hits window
	walk along edge	
	play "hot lava"	
2.	Hop Scotch (2-3 girls play)	(none)
3.	Ball games (kickball, basketball, football, soccer, dodgeball)	
		* don't like basketball/kickball
		kickball bases too short
		boring
		* yell at you if you get in way
		* get kicked off
4.	Compost	
	hide behind it	smells
	doing compost	stinks
	working on compost	
5.	Structure	
	run up slide	too crowded
	listen through peep-hole under it	boys knowck you off
	* tag around it	got trampled
	ballance	people don't let her play tag
	slide	
	go down pole	
	hide and go seek	
	"Quicksand"	
	slide on coat	
	"sand monster"	
	push people off slide	
		get hit in face with kickball
6.	Kickball (West End)	field too small--no fun
		another girl bothers her there
		doesn't like kickball
7.	Pipes	
	hide from friends	too crowded
	like a jail	* too hard to get out
	soccer game goal	boring
		soccer goal

8. Spools

play submarine	get splinters
play house	people throw garbage
sit and stuff	shakes like it'll fall down
play tag	boring
"bottle poison"	ants all over it
freeze tag	littered with milk cartons
fold origami papers	
hide inside busted spool	
* climb	

9. Gymnastics Poles

meet girlfriends	boring
jump around on bars	* too crowded
watch kickball from monkey bars	too cool
climb bars	too noisy
* swing	makes hands dirty
"tick-tack-toe" at twirling bars	don't know how to do it
"aligator" at monkey bars	* doesn't like to hang around girls
* "chicken fights" at ladder	in the way of kickball
* tag	get beat up
run on rubber mats	too small
"freeze tag"	* hurt self there

10. Around Big Pond

* run around it	kids too rough
fall in	boring--just a bunch of dirt&water
pull stuff out	don't like middle of pond
look at things	muddy
climb on fences	people push
* catch fish	too much wine (w. side)
run over bridge	kids get her dirty there
chase	
* looks nice	
sit and look	
tag	
look for bugs	

11. Play on dirt mound just arrived (none)

12. Garden

like to look at plants grow	stinky
* fun to work in garden	not much to do
	it got torn up
	never (got to) go down anymore

13. Not really a place now, but kids like to hide and rest there.

14. Chaparral

walk around	(none)
play $6 million woman	
pretend its a graveyard	

XXx

Chaparral (cont.)
hide
follow the leader

15. Small Meadows and Redwoods

like the trees
walk around
sit and watch fish in shallow area
sit on fence
play around
play army
take book out and read
play barbi dolls
like smell of trees
just like the area

not good hiding place (only neg. comment)

sit around trees
run around
hide
like to sit on rocks
like to lie on the wood and get water from stream
play tag

16. Small Pond

* walking around with friends
* jumping on log by pond
jump off fountain in middle
run through mud
play tag
play house and stuff
jump across waterfall's rocks

people too rough there
boring--just bunch of dirt and water
just dried out and not pretty
after rain all muddy
* muddy
too dry
too slippery no fish

17. Monterey Pine/Seating area

jump on seats
* sit and talk with friends
run around seats

nothing to do
wet damp
muddy lots of ants

18. Shelter

climb on it
climb and jump off
walk around
watch children play
play house
bedroom, stove, city/country beds, heater, etc.
freeze tag
sit in sun
* sit in shade
eat lunch
tag

get pushed around
nothing to do

19. Southeast Corner of Yard

follow the leader
sit on logs
look for plants
hide
look at caterpillars

(none)

look for rocks
meet friends
hide from friends

20. Girls' Restroom

(none)

* stinks
get kicked out
people write on wall
fill toilet with paper
* girls hide inside when they're chased

21. Boys' Restroom

(none)

* stinks
really stinks
smells

22. Lower Parking Lot

(none)

* too many cars
get hit by kickball
girls run around cars during chase

23. Dirt Play Area

(none)

* muddy
dirty
* smells bad (dogs and cats crap)
big kids never use it
gets fleas in it
* don't like playing in dirt
fell and cut arm once

24. Giant Planter

(none)

* muddy wet and slippery
* nothing to do there
all dry its in the way
got holes to trip and fall in
too many people to run in
too dirty

25. Northeast Planted Strip

(none)

nothing to do
too much sun
der pollution
when we walk on edges boys crawl on us.

Post Analysis of Places: 4th graders do and do not like to play at [illegible] (tentatively)

Places not liked are:

1. dirty, muddy, wet
2. smelly, stinky
3. an interference to play
4. dull, no fun
5. too crowded, kids pushy, noisy, in other words kids are aggressive there

(Yard could be "mapped" by kids according to any of the above criteria.)

Places liked are:places where

1. imagination may roam
2. running, jumping, sliding, ballancing and other vertigo play is possible
3. place forms a barrier for
   a. escape in chase games
   b. privacy
4. one may quietly and safely sit with friends or alone
5. it is pretty or
6. there is vegetative or animal life
7. microclimate is sufficiently shady/sunny
8. one may undisturbedly watch other kids play

These liked places fall into one of two categories---active and passive play places. Kids may be able to be encouraged to do their classwork in the passive areas?)

Certain zones or gradations along a scale seem to emerge too, such as the active---passive one just referred to, and another, that of safety vs. hazzard. The girls' bathroom is the most consciously "safe" place. The structure and the small pond are the socially most dangerous places. The Gymnastics poles area is interestingly seen to be the most physically dangerous place.

APPENDIX O

Staff Questionnaire

1. Copy of Questionnaire

2. Copy of Responses

Teacher Questionnaire

Instructions: Please write clearly in black ball point or soft pencil. Thanks.

1. BACKGROUND

1.1 Name_____. 1.2 Classroom teacher or Specialist;

if latter, in what area? _____

1.3 Grade levels you teach now: K 1 2 3 4. 1.4 Man Woman

1.5 Number of years at Washington School: _____

1.6 Where did you grow up? (check one and name.)

Big city ____	_____	Developed Suburb __	_____
Small city ____	_____	Developing Suburb _	_____
Rural town ____	_____	Other ____	_____
Farm/Village __	_____		

2. USE OF ENVIRONMENTAL YARD

2.1 Do you ever use the Yard for your own private, individual purposes?

Yes No If so, describe: _____

_____

_____

2.2 If not, why? _____

_____

_____

2.3 How many hours/week on the average do you use the Yard with your children? a) For informal purposes _____ hours per week.

b) For specific e.e. activities _____ hours per week.

2.4 Please try to list all activities using the Yard you have done this year: 1) _____

2) _____

3) _____

4) _____

5) _____

2.5 What things on the Yard have been most useful in inititating curriculum activities: (please be as specific as possible)

a) This year: _____

_____

_____

_____

b) Previous years: _____

_____

_____

_____

2.6 What parts/areas of the Yard do you use most in class and/or private activities? Why? _____

_____

_____

2.7 What parts/areas of the Yard do you never use? Why? _____

_____

_____

2.8 Are there any specific Yard activities/events that you participated in that particularly stand out in your mind this year or from previous years? _____

_____

_____

_____

3.0 BEHAVIORAL CHANGES

3.1 If you were at Washington before this year: How would you describe

changes in children's behaviors at recess time over the course of the Yard reconstruction? Please consider your answer carefully and be specific. _____

3.2 If you were new to Washington this year: How would you describe the children's Yard behavior at recess compared to the school (name: _____) you were at before? Please be specific. _____

3.3 All teachers: From your own point of view, how do you feel about Yard duty on Washington Yard compared to an unreconstructed, traditional Yard? _____

3.4 In your class' curricular work, and in its general activity, what connections between indoor-outdoor have you made or observed, and what changes did you make in your class' work to make connections? _____

3.5 Have you noticed any relationship between what your children do in their informal play activities outside and what they do in your instructional program? If so, describe: _____

3.6 Have you observed that experience outdoors modifies or channels some types of children rather than others? if so explain: _____

4.0 VALUES AND CHANGE

4.1 Have your feelings, attitudes and perspective on childhood and/or education been changed/reinforced by observation and use of the reconstructed yard? If so, how? _____

4.2 In particular, how has use of the Yard helped you to formulate your ideas about Environmental Education? _____

4.3 Was the PEET Entry Session helpful? a) If so, how? _____

b) If not, why not? _____

4.5 How satisfied are you with the amount and intensity of use ~~you~~ have made of the Yard as a curriculum resource/educational setting this year? Indicate specific factors that have fostered or inhibited use.

4.5 In the future, do you see your utilization of the Yard increasing or decreasing (circle one). Please list any projects or activities you are thinking about initiating or dropping in the future.

4.6 Is there any particular thing to do with the Yard that you would like to see changed?

.7 Is there any particular thing you would like to see added to the Yard environment?

4.8 Is there any particular thing you would like to see taken away?

4.9 Is there any particular element or characteristic you would like to see restored?

4.10 Overall, what would you say are the three most successful physical things on the Yard today?

Why?

4.11 Suppose the authorities decided to demolish or close the Environmental Yard. Would you defend or oppose that decision? What arguements would you use to justify its existence or demolition in a hearing on the issue? Speak from whatever points of view you feel are most pertinent.

4.12 Discuss any other thoughts, suggestions, ideas, criticisms, etc. you might have relevant to any of the above items.

Responses to Teacher's Questionnaire, listed by question, starting with Classroom teachers by shortest tenure to longest, and then with specialists, starting with longest tenure to shortest.

1.1 Easter Goldstein, Beverly Goggio, Sue Douglas, Gloria Cooper, Phyllis Goldston, Anita Key, Ann Perlin, Whitney Schulz, Pearlene Shannon, Joyce Bjorgum, Mel Cox, Manny Funk, Bob Houlehan, Jean Huston, Dorothy Russell, Orel Wolters, Bob Irish, Angela Wong, Lanitsoi Williamson, Rinna Wolfe, Arlette Schlitt, Fern Glover, JoAnn Cheesman, Tom Armour, Janet Strothman.

1.2 Classroom Teachers: 18, Specialists: 7

1.3 Grade levels: K:5; 1: 8; 2: 12; 3: 9; 4: 4

1.4 Men: 6 Women: 19

1.5 Number of years here: 4 mos., 6mos., 1 yr., 2, 2, 3, 3, 8,8, 10, 10, 10, 10, 11, 11, 14, 15, 16; 6 mos., 1 yr., 6 mos., 4yrs.,5, 6, 7.

1.6 Where did you grow up?

Big city:	Philadelphia, un-named, un-named, un-named, Oakland, SanDiego, un-named, Shanghai, Brooklyn, New York, New York,	TOTAL: 11
Small city:	un-named, un-named, Winchester Kansas, un-named, Galveston Texas, Torrence Ca., San Pedro ca., Oakland Ca.,	TOTAL: 8
Rural Town:	un-named, Manning, Ia., un-named,	TOTAL: 3
Farm/Village:	un-named, El Dorad Co.,	TOTAL: 2
Developed Suburb:	Germantown, Brookline Mass., Los Gatos, E. St. Louis suburb, un-named.	TOTAL: 5
Developing Suburb:	un-named	TOTAL: 1
Other:	(none)	TOTAL: 0
		GRAND TOTAL: 30

2.1 Do you ever use the Yard for your own private, individual purposes?
Yes: 14 No: 9 No Answer: 2

If so, describe:
1) sand and water experiments, 2) watching plants grow, 3) meeting place for treats, 4) observations of changes such as bareroot season to flowering stage. (aparently did not understand question)

I have taken friends (other teachers from other schools) out there on Easter vacation and weekends to show them the Yard and disscuss how much better children get along together there than on the traditional Yard.

Once to show a landscape architecture student friend. (no answer person)

Observation--relaxation--listening--thinking--I find it to be restful and restorative.

I go out at recess and "hide" there on bad days--its calming. I watch the trees and pond from my classroom window. (It's pretty.)

To To walk through, to think about learning potentials and to relax in a quiet setting and daydream.

Just to walk through reflecting and enjoying the experience.

For a walk on occasion--with and without the children--peaceful.

To observe changes and happenings and children's interactions. To check our garden and plan for its use.

Walk among the growing trees and plants gives me a feeling of relaxation and satisfaction.

My own children and neighbors (ages 5 to 10) like to come and play on weekends.

1) Reference to nature for inspiration for creative writing, 2) as research source in developing models of 2 islands in 3/4th grade classes.

No. Other than leisurely strolling through it and enjoying children at play.

After school recreational activities for my son.

To walk in, sit and rest in, to eat lunch. To look at plants, animals, birds--

walking, eating, enjoying.

2.2 Following are the "no" answers

Not large enough or private enough

No reason--I just haven't in the past.

I don't seem to have time to get all the things I consider essential to teaching done; so private and individual pursuits are done at home, which is distant.

Have no occasion to--YARDFEST exception.

Not sure what you're asking.

Time

My time on the Yard is spent with either my class or when I have Yard duty.

It is not convenient to my home and involved in classroom when I'm at school.

My duties prevent this from happening.

Lack of time!

I live in a quiet area with much greenery and trees--I enjoy walking and like to do it around my home. It is also a matter of time. If I had time I would enjoy the Yard as a place to sit and relax, read a book, etc.--but at present I have too many demands on my time to make that possible.

2.3 How many hours/week on the average do you use the Yard with your children? a) For informal purposes: (hours per week)
2.5, 2.5, 0, 2 (hard to say, sometimes very little, sometimes a lot), 1, an average of 1, 1, 10, 3, 1, 10, 1-2, 2, 0, 1.5, 2.5, 8-10, 5-; 0, 0, NA, 0, 0, 2, 0. GRAND TOTAL: app. 59 hrs.

2.3 b) For specific E.E. activities: 1, 2, .5, 1-2, 1, 1+, 2, .5, 0, .5, 5, 1-2, 1, 3½, 1, 2, 2.5, 5-; 0, 1, NA, 0, 0, 20, 0. GRAND TOTAL: app. 42 hrs.

2.4 Please try to list all activities using the Yard you have done this year:
Observations before using the Level A-Science Series on Ladybugs-Trees, etc.
Planting birch-bark trees and wildflower seeds
Watching compost being turned in the afternoon
Studying effect of water on land and beach areas.
Studying parts of plants.

Planted and cared for a tree
Planted and cared for wild flowers
Litter parade
Math project on graphing as a result of litter parade
Children caught ladybugs and small fish and their differences were discussed
Wood sculpture project with Tom Armour

Gardening
Tree, bush, seed planting
Drawing whales
Litter parade and aluminum recycling

planting wildflowers, trees
exploring
Developmental physical exercises
Enjoyment

Developing awareness using five senses
Planting--pumpkins, cotton, vegetables
Weather unit
Measurement unit
Yardfest--tree planting

Listening, feeling, tasting, smelling, touching
Planting--and caring for plants
Map making--mapping out the Yard
Water--Studying plants and animals found in ponds
Math activities--counting by using our feet, distance , measurement,

Humus pile--turning it, study of heat, chemicals, nurture.

planting flowers with kdg. class
Yardfest
P.E. games and free play
Nature discussions
Art class outside

planted trees
listed for sounds
watched the fountain and creek "turn on."
participated in garden watching every Mon. a.m.
sent out gardeners each day.

observation, to explore, to compare relationships, and try to find out the "why" of what is out there.

planting
observation
exploration

Use and experiencing SEED cards
cook out
Animals in enclosure area
Art activities

Noted changes in plant life.
Identified trees
Winter garden
Some bird watching
Variety of plant life
Variety of animal life

explore
planted trees
visited vegetable garden
pond--study of water
gathering of rocks, soil, mud, clay for planting exp.

gardening all year, trees, wildflowers, watering
pond observation
P.E.
Some measurement and graphing
Some habitat and camoflage study
Litter
Yardfest

Games
Planting--two trees
Planting wild flowers
Observation of ponds

Fall-gathered seeds from plants
Listed various forms of life we could see
Planted tree, studied trees, learned tree songs

Water power study--uses of water
What's in soil/dirt?

Creative writing
Specific writing tasks--describing, experiences, etc.
Art--various activities
Diary keeping of tree planting
Gardening--journals, reporting, planting
Mapping activities
Oral discussion
Brainstorming

mapping, exosystems, populations study, research project of trees, gardening, planting wildflowers, composting, compass making, and directional study, temperature and weather (soil and air)
***
supervise children at play
orientation to the environmental yard
counsel some children in the Yard

only here two days week

(none)

(none)

(none)

Vegetable gardens
Environmental study of native areas
Study of weather, water, soil air.
Composting
Tree and wildflower planting
Banners
Env. art, sculpture, construction.

Help children find pertinent information
Select materials to support this area
Plan informal outside singing group with work-study student.

2.5 What things on the Yard have been most useful in inititating curriculum activities:
This year:

Just having the pond, planting area and to be able to watch change such as the fencing and re-seeding the pond has allowed children t observe and record changes. My class especially enjoyed the green house and our earthworm farm.

The live animals--bugs, fish, chickens, ducks.

The adults--members of the PEET project.
The cards--brainstorming in the Tuesday sessions

Pond, plants, general atmosphere

pond--for five senses and plants and animalx life for take-offs on class activities
planting areas--green house--planting, cottom, pumpkins, etc.
objects such as trees, rocks, sticks--for awareness of five senses and for measuring activities.

PEET STAFF Dr. Herb Wong
Tom XXXXXX A'mour
Seed Cards
Days in "Orbit"--Peet Entry Session

Planting vegetables and flowers
physical fitness: relays, etc. running, climbing.
recycling

planting of the trees
great brainstorming topic

the pond
the animal live there and also the animals atracted to come.

planted areas -- pond --

pond
planted areas
compost

plant and animal life -- primarily the plants

all of the above

Tom's supervision of garden; the total school's involvement in tree--planting, wildflower planting, litter collection, Yardfest.

The pond--more oral discussions relating to pond-life and survival--art--and poetry--putting into words and illustrating feelings about things on the Yard--the ponds in particular

Plants, water and Ponds.

The new things which come into the Yard--such as the planting, the ponds, operating and just being in closer proximity to the area than in previous years.

the varieties of trees the different natural communities the enclosed vegetable garden site, lately the reactivated ponds.
***
(none)

planting of foods, pond, special layout

(none)

(none)

(none)

The compound and garden strip. The pond area. The woodland area. The meadow. The greenhouse.

Different environments, such as the pond; Environmental Ed. activities to beautify Yard (things in which children take real pride), such as, banners for Yardfest, gateway sculptures.

2.5 b) Previous years:

(none)

(none)

(not here)

Farm animals last spring

(none)

Dr. Herb Wong
University People here last year

(none)

(none)

I did not feel as comfortable in previous years as I do now. Now I know that I can teach basic skills from the E.E. Yard as I do in the classroom.

?

little farm

(none)

(none)

Making surveys by children of city parks and comparing with what our playground offered.

none

Plants

(none)

the compost bins, the garden strip, the natural area
~~~
(none)

not here

(none)





(none)

(none)

the garden strip, the stack sacks.

helping to plan yard, especially involvement of children; again, children's art work; walls, large plywood cutouts of children along fence, for example.

2.6 What parts/areas ofthe Yard do you use most in class and/or private activities? Why?

We enjoy having the shelter for a meeting place and for treats. The children enjoy having paths and water to watch and explore - and plants and trees towater and structures for climbing and crawling.

The pond area. I have always enjoyed a sense of inner peace strolling around a pond (Especially if it has a weeping willow).

Garden. I have not used the Yard much this year, as having to start over after a 2-year leave I focused on other curriculum responsibilities.

reconstructed area--more things to explore and change.

hut, where can discuss outdoor activities
pond.

The ponds--chaparal areas--tree area--then are the most "alive" areas for me. Do use the "hard" areas for games and children enjoy the equipment and, i.e. play equipment.

climbing structure--fish pond--for exploring nature--P.E. games--nature talks--

pond--kids love it

pond area and gardeh area

planted areas for educ. purposes

planted areas, pond, animal enclosure.

S.E. corner--because it is a good meeting place to start activities.

pond. because it continues to fascinate most of the children

enclosed garden--because it is an always growing, changing area and needs our attention and Tom has managed it so thereis plenty to do and see and record.

The trees and ponds seem to create more interest for my class, thus providing opportunities for Lang. Sci. and Art activities.

planted and pond area
~~~

The pond area and surrounding environment and play structures--These are the areas which children preferred and were interested in mainly.

The Grove St. side--the stack sack area for sitting--chatting, the boys play soccer in the concrete area and we use the nature area for most of our study purposes.

***

(none)

(none)

(none)

(none)

(none)

The compound/garden strip.for daily recording, maintenance, studys. Construction.

Pond and plant area: Most beautiful; has place to sit; most suitable for reading and other quiet activities.

2.7 What parts/areas of the Yard do you never use? Why?

(none)

None

I use them all at one time or another

There aren't any that we haven't at least explored

Climbing structures and concrete things to climb on--the children use these extensively, but I don't use them for class activities mainly because of this. I like to use areas where the children need to be encouraged to use.

use all parts.

There is no area of the Yard I have not explored and used with my class.

The corners: inaccessibility--nothing to do there.

Paved area because it is bleak and does not lend to a feeling of being in tune with nature.

? meaning?

children do that on their own.

none

none

Some I don't use with my class because there is so much else to do at school. (The children use it on their own.)

The gardening area--we did not opt to get into this area. However the children are very much aware of the garden and comment upon the growth from time to time.

Use all parts

Area west of the play structure (slide)--still many interests etc. to explore in other parts--a less exciting area.

Mostly the McKinley concrete area--nothing there attracts the children.

***

(none)

play area--not a classroom teacher--no pupils to supervise

(none)

(none)

(none)

competitive sports area except to walk thru

Have not been activeky involved in growing plants, (garden and compost areas), but I still enjoy them.

2.8 Are there any specific Yard activities/events that you participated in that particularly stand out in your mind this year or from previous years?

(none)

I enjoyed the Yardfest because there seemed to be something for everyone and lots of possibilities for "pupil" participation

I like the litter parade, compost, aluminum recycling--other things partly a social--responsibility activity.

Two activities--planting 3 trees in the Yard and the Yardfest

Tree planting--Litter parade--Yardfest

Map making, Planting of our own trees and shrubs, Litter-collection to graphing skills. Studying living things found of Yard.

Yes--the YARDFEST. The arrival of new trees.

The Yard Fest, tree planting.

Planting and caring for gardens, planning curr. areas using whats on the yard.

class planting of trees and shrubs

cookout. Animals in enclosure. Bird population. Tree growth.

The yard fest! PEET meetings

planting of the bamboo and birch trees.

Garden, Yardfest, Banner-making, use of U.C. students last fall for small group Yard-related activities.

The trees and wildflower planting activities. It was rewarding and exciting to observe the children as they used the tools for planting and now continue to observe the growth of their exports.

Children's choosing and planting trees-- Enthusiasm for planting wildflower seeds-- Litter parade was valuable to develop children's awareness of a problem

Banner making, tree planting, increased brainstorming, type of activities on the class

This year's tree research project. the snail race during the Yard Fest and the compost on the Yard two years ago.
see
The yardfest

(none)

(none)

(none)

The "feed-in" day I attended as a staff member--The Yardfest

The Yardfest, and almost all daily activities.

PEET Entry Session; activities and discussions with Gloria Cooper's class, centering around the film about trees.

3.1 If you were at Washington before this year: How would you describe changes in children's behaviours at recess time over the course of the Yard reconstruction?:

(none)

(none)

(none)

Children's games have been more imaginative, there seem to be less problems on the Yard.

While still involved with balls and equipment much of the play has turned to natural things, mainly investigating things in water and

ways of using pond area. Less complaints about other children and fewer children doing destructive or dangerous things.

I have found my "yard duty" times this year to be the most enjoyable ever. The children have become so aware and interested in the pond and chapparal areas. They invent wondrous games--it has reduced tremendously unfavorable "incidents."

(none)

The area is conducive to non-fighting. It gives spaces with nooks and crannies. It provides green and brown which soften them.

Super! There does not seem to be as many conflicts on the Yard as before. Most children seem to be involved in some kind of discovering and sharing.

Activities have changed--from just playing and games to activities as sailing boats, looking at pond life--some of the same continues too.

Children have more choices . There is more exploration.

A great deal more of the childrens' time is spent in the nature area and far less activity is seen on the black top. Activities are far more varied and the children seem to enjoy recess much more. Also there seem to be less fights!

The children have adapted (broadened) their recess and yard activities and games to include the "new" yards dimentions.

Less need to settle arguments and/or fights in natural area. More serious accidents in black-top area. Those who want to play Kickball all the time seem to have adapted to space.

They are more excited and can hardly wait to get outside. They seem to look forward to finding new things every week. There seems to be less fighting because there is something for each child to enjoy and explore.

As more area was devoted to natural environment play became more creative and less friction and conflict is observable. The addition of flowing water has the most positive effect on children.

More children have depended less on organized activities to keep them amused. There has been an increase in creative, self-amusement types of activities centered in the three areas--pond, dirt; and play structure.

There is definitely much less hassle during recess now--there are enough different things and places for children to to that eliminate sheer boredom outside.
see
(none)

(none)

(none)

Because of the nature of my job, I never have the opportunity to observe children at recess time. However, judging from their conversation in class regarding their yard activities, it is obvious that there is much greater excitement over events which occur outside.

have not had the opportunity to observe as have not had recess duty.

More creative play/activities. A developing awareness of their environment and fellow man/person. More peaceful interaction--lots of spontaneous discovery, adventure, fantasy.

Children are more directed on the Yard to activities which are suitable for recess--climbing, using the bars, etc. In addition, there are areas to help them use imagination: central structure and natural environment; and places where they can get away, approaching more to open fields or woods, which I remember so well as a child. Far fewer children use the Media Center as a refuge during recess and lunch time.

3.2 If you were new to Washington this year: How ould you describe the children's Yard behavior at recess compared to the school you were at before?:

(substitute) I have only been here four months and our recess period is shared with two other classes so we have lots of room and freedom with the Yard. The children all seem to be able to find something to do because the unlimitless possibilities of the Yard. I enjoy having a long block of time such as 20"-30" instead of two short periods. This gives children a change to use standard playground equipment and also have a chance to use other parts of the Yard. The trees, sandy areas and logs give children lots of opportunity for imaginative play.

(Emerson) The children get along together much better at Washington. I always have be seeing on Yard duty that kids are really interested and don't have time to fight.

(Longfellow, Whittier) Much calmer, fewer fights, less hostility--both from kids to each other and from kids to teahers. More kids are active at recess--not just sitting around.

(none)
(none)
(none)

(Jefferson--LeConte, etc.) The children's Yard behavior is just beautiful--area for games--free play--the pond and nature area mostly respected and very much appreciated--climbing apparatus loved!

(Emerson) Calmer.

(none)--10 consecutive teachers
***
(no response) Children use the environment in more creative ways. There is much less conflict, children are more serene at ease with each. They have a respect for each other. Children actively use the environment.

(Whittier, Jefferson) Till Nov. was a district sub--so saw several playgrounds--children softer in tone, more reasonable, easier to communicate with.

(Subbing--BUSD) Behavior much freer--lends itself to exploring imaginative, non-competitive games--provides much more opportunity to non-joiners, non-team oriented kids for play. Fluid enough to provide play for everyone.

(none)--4 consecutive "specialist" teachers

3.3 All teachers: From your own point of view, how do you feel about Yard duty on Washington Yard compared to an unreconstructed, traditional Yard?:

It is a pleasure to see the children enjoy themselves so much.

I have enjoyed it very much and there have been few complaints from the kids.

Less punitive, more relaxing. I was a snackbar "narc" at Longfellow--a set up job to be in opposition to the kids.

Yard duty is never a "chore". Its very refreshing to walk out and see colorful flowers and lots of greenery. The general atmosphere has a calming effect on the children.

much easier--much of the time I don't have any problems to settle.

This is "heaven" on earth--I can truthfully say I enjoy my Yard duty! What has to be the ultimate. I discover new things with the children at every duty.

For .5 hour a.m. recess should be 2 teachers for such a wide area--duty easier because kids have so much more diversion.

I prefer the new yard vastly, I LOVE the trees.

It is no longer a dread to do Yard duty. I do not need to stand around wondering what children are doing. They all usually in the Nature areas, less fights.

Sometimes I worry more because of the dangers on certain structures--since recesses have fewer children because of difficult scheduling this helps a lot.

More variety, more interests--less conflicts.

I enjoy recess duty a great deal more. I really enjoy walking around the Yard and seeing what's new.

It is harder to watch because of its new dimentions but more pleasurable to stroll.

I enjoy being in the "Back 40" and gravitate there. I used to try to avoid that area.

It is more difficult to see the children while they are "doing their own thing" but almost no disciplinary problems. I find it very pleasant this year being on duty.

Much, much more pleasant and rewarding.

There has been fewer personal conflicts between children but Yard duty is more difficult because there are many areas which are difficult to see so constant movement is needed in order to xx try to cover all areas.

It's very pleasant now. I hardly encounter any more tattletaling from children. Generally I can simply enjoy myself out there.

(none)--2 consecutive people

more fun--less active supervision

(none)

I have had yard duty in the mornings only when there are few children on the yard--However, I find that they enjoy a variety of activities on the yard and that they become involved with play in the pond area.

From a previous negative to a very positive feeling

It is easier to supervise, because children may be directed into constructive activity. One difficulty however, is being able to see the whole yard at one time.

3.4 In your class' curricular work, and in its general activity, what connections between indoor-outdoor have you made or observed, and what changes did you make in your class' work to make connections?:

I make a definite effort to tie in science activities with possible Yard activities. Children enjoyed making observations and making brief reports.

I have noticed that kids seem so interested in what they find on the yard that I should be capitolizing more with immediate lessons in the room to follow up on those interests.

not enough. Come back next year for questions! My student teacher has done weatherwith kids--some outdoor connections.

Making children aware that the abstract ideas learned in the class are representations of a larger world which could be seen outside on the Yard.

Trying to produce inside what goes on outside--ex. making rain, planting some plants both in and out, and trying to find out the difference in growth and what caused them.

It is not difficult to make connections--the activities outdoors and indoors become as one total--we take from the outside in xxx and from the xxx inside out. Changes in class work to make connections were so natural that didn't seem to be "changes" they enhanced each other and were so mutually compatable.

Discussions about recycling-- Nature's cycle-- Respect for all living matter-- Care of keeping environment as clean as possible.

(none)

There has been more connections with what I am doing in my class and with the outdoor. I have xxxxxxxxxxxxxxxxx planned activities with children to take us outside.

A lot of interest in plants, animal life--use of an integrated curriculum

Indoor and outdoor activities seem more unified and learnings are more intermingled.

Writing activities associated with outdoor visits. Magic circle activities. Many more class activities outside than in the past.

We got into a whole unit on water and another one on "dirt", etc.

Being pulled so many different ways and also having so much input in many areas this year, I really have not done nearly all I would like to do. Garden--growing and caring for/cooking, eating inside. Using, tasting, seeing all the parts of a plant. (Beet) Seeing close to a full cycle of plant growth. Indoor plants--from seeds; cuttings. Camoflage games--outside in real world inside with contrived materials.

plantings that were begun in the greenhouse were brought into the classroom for observation and taking care of before taking them home--A lot more verbalization about growing things--they are aware.

Children bring the outdoors inside--activities inside must accomodate needs children have to participate in yard activities--More time has been devoted to planting--a general higher level of awareness about natural environment.

There has been an increase of the kinds of things children bring in to talk about. Many of the activities indoors related to things on outside.

The indoor and the outdoor is one big continuum--children are free to go in or out as their studies dictate. My children can go out on their own unaccompanied by adults--its like going to another part of the classroom.

(None)--4 specialist teachers

Used more emphasis on survival, on city problems, on communiel living (meaning community responsibility)

Measurement activities were designed to eleminated the dividiom between the indoor--outdoor world.

I have centered my curriculum entirely on the Yard this year and can't seem to "get it all in." A lot of the things are similar to what I've done, but with a new foci.

3.5 Have you noticed any relationship between what your children do in their informal play activities outside and what they do in your instructional program? If so, describe:

(none)

The kids cooperate pretty well with each other--especially well considering they have had several changes this year.

Only the boy-girl games--played outside--inside kids do bring things to look at in class from the Yard.

(none)

(none)

They are constantly bringing in "things" from the Yard--plants--animals and organisms--seeds--leaves--rocks--these are always part of our ongoing program--they are incorporated into our on-going activities--sans any effort--so natural.

Yes--entries in their journals about the Yard--the thrill of taking a fish home--joy of planting--

No

Yes, I have noticed them discovering under rocks, in the ponds, sharing with each other what they see. Lots of excitement.

Not sure

They make use of what they've learned or experienced in their informal play

They seem to be more relaxed when they come in and therefore work better in the classroom

(none)

direct relationship--gardening/cooking Enthusiasms and concerns--- pond, stream, fountain, slide, animals, wildflowers, pile near entrance to Nat. Area., garden,

No

Children come in from Yard much less frustrated--but dirtier!--Room is dirtier--Children are happier and "settle in" faster

No

Children often find interesting things outside that they want to find out more about in that case they just bring in inddor for the duration of the study--and release it back outdoor again.
***
(none)

No

No--unfortunately, my program is structured in such a way that it does not lend itself to that. I might try to change that in future (writing activities, etc.)

(none)

(none)

I think there is a great carry-over--and it is reported by children and their parents--concerning home interests--activities--that have changed--sharpened.

(none)

3.6 Have you observed that experience outdoors modifies or channels some types of children rather than others? If so, explain:

(none)

Children who have more inner anger or lower self esteem seem to thrive better--

The very active have much more to do and spend less time bugging each other. I don't see too many kids exploring the wildlife except in the pond--mainly interact and each other, but more fertile environment to do so in.

No I haven't

(none)

Definitely-- opens new experiences and attitudes to many by affording opportunities they would not other wise have had.

A large exciting Yard area as we have here permits kids to utilize a variety of play--happier kids.

Yes--"the basketball heroes" are relatively untouched by the whole area. The gentler ones are in there more.

I have noticed ~~thamxdiexmxxxdmgxmadamxm~~ that my more aggressive children are more involved in exploring

Not clear as to meaning

Children are different--some prefer less crowded spaces or shelter etc. Some realize the outdoors has much to offer!

They seem to be more relaxed when they come in and therefore work better in the classroom.

(none)

Some children now choose to spend all of recess time in the natural area. Others still prefer city playground activities--(bars, slides).

No

At five many children use physical equipment such as bars, slides, etc., more than natural area. I think all children benefit from both areas.

Yes, there are some children who are more the fantasizers who now have a place to capitalize on this aspect.

I find that all children are excited by the Yard.
see
(none)

Some still hyper-active--could see greater use to be part of "P.E" activities if I were class teacher (as a child age 9 in N.Y. we planted, weeded 1 day week as part of P.E.)

(none)

(none)

(none)

I can't categorize "some children". It appears to be all who are involved--change in attitudes, awareness--interest.

Some children need physical activity more than others. It seems as if some who simply find it difficlt to sit indoors can do very positive and valuable activities outdoors.

4.1 Have your feelings, attitudes and perspective on childhood and/or education been changed/reinforced by observation and use of the reconstructed yard? If so, how?:

(none)

I have always felt that children who are interested and busy are happier and this yard helps to achieve this.

(none)

Only in the sense that the beginnings here at Wahsington should be a integral part of all educational processes.

Reinforced by knowledge that children must be free to question continually and be given time to express what they observe, This shows with the many natural things on the yard that they discover and question about.

Yes. Gives me an opportunity to observe my children in another environment which I can use to great benefit in relation to their feelings and attitudes and learning prospects. I can get another kind of input about them--and the more I can get the more I can do.

Kids are more relaxed and happier vis-a-vis their play time and environment during recesses.

I'm reminded again of the curiosity of childhood and the adoration of WATER PLAY!

I feel that they have been reinforced and extended or expanded.

Not specifically.

Yes--learning is less focused on the indoors--I like the idea of classrooms without walls.

The children seem much happier about going outside. Ther seems to be more respect for living things and the aesthetic.

Yes. Changed and reinforced by offering many new alternatives to the children that some how seem more complete environmental exp.

Reinforced--I hadk a large, undeveloped acre to grow up on and was free to run, crawl, dig, plant, climb.

Yes--while I grew up having a Yard at home to enjoy I did not have the input from an adult to explore or help make changes. Our yard was to "look pretty and be kept clean."

To observe the action of young children on the yard reinforces my conviction of many years that children need more experience (play, if you will) in and less formal activity.

It has served to revitalize and revive attitudes and perspectives in seeing, children react on the yard.

Yes, I think children's natural desire to explore and to "mess a around" the yard offers us a marvelous opportunity to use WEY for interesting and viable curriculum activities for youngsters.
see
(none)

Reinforced: I've done island projects 2X before--always bring children from book knowledge to feeling, touching, building activities.

Much reinforced--re. natural curiosity and creativity--possiblity to challenging and channeling these

(none)

I have not used the Yard in my program

Really reinforced most pleasantly. How could one teach elsewhere and find the joy in exploring your surroundings and sharing w. others.

Reinforced, especially by observing the joy with which children use the natural areas and the play structure; their responsibility in caring for gardens.

4.2 In particular, how has use of the Yard helped you to formulate your ideas about Environmental Education?:

I see the yard as a positive force for curriculum development in such things as relating to the environment, recycling, food chains, etc.

Even though I have always been interested in the out of doors, it helps to have the yard there every day for observation of change--

(none)

The awareness of the natural environment is a long awaited integrator to a child's learning experience in the schools

In using the yard one use leads to another and made me realize how all things are related and tied together

Wouldn't want ever to be in a school that did not provide this opportunity for children. It enriches every but of our curriculum and "transfers" to all aspects of our life together.

It has become a springboard for discussing and sharing nature and its myriad forms.

Its there

It has made me more aware of the Environment and how humans are destroying it. How I can help keep it.

Its an extension of classroom experiences.

I've related it to a balance within the environment which is essential for healthy survival.

It has made it more important and applicable.

It has helped to see the many possible interelationships between the yard and the indoor classroom.

My feeling about responsibility for my own litter had definitely been reinforced, and I have worked hard to <u>try</u> to convey a re-

sponsibility to my students.

Because cities have become so overgrown and pollution is a major factor I feel our Environment has greatly suffered. I'm becoming more aware and appreciative of nature.

Its a laboratory to test ideas--I can try out ideas and observe how children react.

It has a broadening effect leading into other curriculum areas.

E'E. needs to begin from where the child is--what he is and what he related to. WEY offers just this--a beginning point to build on E.E. curriculum that is meaningful and understandable for the child.

(none)

Love that opportunity to participate in a program that reinforces my own personal beliefs.

Wish I'd been <u>able to use</u>

(none)

(none)

It has help me realize how easily the "web" of concepts flow in a interdisciplinary environment.

Confirmed what I already thought about Environmental Education.

4.3 Was the FEET entry session helpful? If so; how? If not, why not?

N.A.

Yes--it helped to inform me what was going here--For me it could have come later so the many questions I have about it now could be answered.

Yes: It got me geared into thinking about the yard.

Yes: Opened up possiblilities and created new spaces for me to explore with the children.

Yes: In showing the variety of possibilities open with the Yard.

Yes: Stimulated me to be more creative in my use of our Yard--Gave me new ideas which I was able to put into use.

Not present.

Yes: found out more about what was going on.

Yes: It really made me start thinking seriously about things I took for granted before.

Truthfully--not too much. Because I want to work on activities directly relating to my children's needs! I thought that was why we were here--

Yes: opened up doors to aspirations and expectations.

Yes: I got a lot of good ideas and it made me think more about what I was doing.

It helped to further sensitize and make aware of what is out there and some ways to use it in the curriculum.

Yes: It was helpful in opening others' backgrounds and feelings to me. No: I forget (why), but do recall a feeling in the P,M. of frustration

I learned what to look for on the Yard, how to help the children become more aware and more observant.

Yes: It was an excellent motivator--a great help.

It was an interest starter and started thoughts flowing.

As an instructor I feel that the participants gained from it and felt positive about it.
see
Yes: it is a must. I was able very early to group the concept of the Yard and school.

Yes: opportunity to share with other teachers and see richness of collegues.

(none)

It was extremely helpful as a concrete introduction to the importance of extending childrens knowledge to ~~[illegible]~~ include their total environment.

(none)

Yes: It opened people up/was a positive introduction to those who had not ventured out--

Yes: very helpful to compare ideas with other staff

4.5 How satisfied are you with the amount and intensity of use you have made of the Yard as a curriculum resource/educational setting this year? Indicate specific factors that have fostered or inhibited use.:

Tom was very helpful in helping us begin our activities.

I felt I needed someone to actually take me out there and discuss the whole history and philosophy@-I've felt very vague about rules in the area.

Only the boy-girl g
We haven't used it enough--would like to use it more. Difficult this year (see 2.6). I intend to use it much more next year--am anxious to see the new cards which I think have many excellent ideas.

Given the level of my awareness and personality--I am satisfied with what I've done.

Quite satisfied in relation to time available in school year. Less satisfied when I realize many other things I wanted to do that grew from activities I did. Project people really fostered the use.

I have used the Yard more this year than I did in years past. I am very pleased with the results of the way I used the yard and how it has helped in the development of my class. It was helpful having the PEET people around to aid and abet you in specific plans. I always found them more than willing to help me.

Quite satisfied--Pond--planting trees--garden and flowers and landscaping provided enriching experiences for us--

I would like to use it more. But I'm lacking in motivation for greater use at this time. It requires extra time in planning and my extra time has been spent on other school things.

I am very satisfied! I now realize that I can teach all the basics to my children without staying in the classroom.

I was satisfied--Tom Armor helped a great deal too--He was a valuable link!

I would like to focus all my energies on the E.E. project and eliminate other expectations. Such as Project Read, Comp. Ed., etc. Teabher's energies are too scattered and diffused.

Somewhat. I wish I would have had more time to devote to it but I felt I have been under a great deal of pressure from the district to perform.

Tom has been very helpful in planning and instigating weekly sessions with my class.

I am not satisfied with myself, but I certainly do not put most of the blame on myself. We've had worthwhile input in many areas this year and have not had any one particular focus--Magic Circle, Nutrition, Project Write, Tabs, Metric Measure, Environmental Ed., Lunch Program, and we have had much to do that I do not even want to do. Plus there are things I have ~~[illegible]~~ done in the past that I want to do but there is not enough time to do a really thorough job of. (cooking, dancing, art, wood-work, music, movement

I have not made enough use of the Yard this year because I have channeled my greatest amount of energy inside the classroom trying to cover the academics

I would like to use the Yard much much more--for inhibitors see 4.3.

No--I would like to have used it more. I need to reorganize time, etc. to make it possible.

I feel that the Yard staff this year has been an enormously positive force in enabling my class to be outdoor as much as we have been.

(none)

Insufficient--but my skills have been used mostly to re-inforce reading skills and insufficient time for all. I'd like to give children.

Not satisfied--I never felt I had the time--too busy just learning and implementing reading program as is--focusing on kids' specific skills needs.

Extremely dissatisfied for reasons mentioned above. Furthermore, my concentrations regarding student needs must necessarily focus on areas of experiences which must be developed to prepare a child to intellectually deal with his environment. The children whom I work with are devoid of some very basic skills--skill that are essential for any meaningful intellectual stimulation. They need to be saturated with as much direct instruction as possible. From my perspective, time is a most crucial element, and my curriculum for them was designed to use time as effectively as possible.

(none)

There was lots of satisfaction--along with frustrations in communications, scheduling, lack of time/energy for all the ideas: the weather was ideal.

Would like to see a closer relationship between Media Center and outdoors. Needed for this--some sort of arrangement for traffic between Media Center and Yard; people to help supervise those dropping in (parents? students aides? volunteers?)

4.5 In the future, do you see your utilization of the Yard increasing or decreasing (circle one). Please list any projects or activities your are thinking about initiating or dropping in the future.:

M.A.

Seasonal changes in plants, weather, charting temperature--More math.

plan to do garden and initiate it with all kids--use it for some of schoollunches too. Also explore wildlife and plants much more. Pond activities, etc. Continue litter parade.

Won't be here--but I carry all I've learned with me to be expanded in the larger world of Nature.

This depends on the extra adults I have available without project people around some of the extensions of what I do can't be done.

I intend to continue with all the activities I did this year involving the yard and will continue to refine my weather--temperature--measuring--mapping--graphing--planting activities.

increasing

increasing thinking about will happen this summer.

I see the utilization of the yard increasing. I play to use it more in the future.

Yard increasing

Continue use and elaboration of SEED material. Spontaneous use of Yard and materials.

increasing

more experiments with the mass of natures resources that have accumulated.

I don't know--It really depends on other requirements including district and state accountability. 1) being included in weather station. 2) Definite activities centering on pond--As we did on garden this year. 3) Something with the various plants.

Gardening with the idea of cooking in class something from the garden, Reading and sharing Library Books. Art--(watercolor)

More use of garden area-- More study of birds and pond life. More use of yard to develop each child's sense of personal responsibility for the environment.

I would see it increasing. I have several ideas which have not gotten beyond that so far.

I hope I can maintain this level of participation next year without the Yard staff and my current 4th graders. I have not contemplated dropping any of the activities. No new ones are formulated yet.

(none)

If here next year--Would begin by "adopting an area" building it, using resource staff, extending beyond yard to nearby houses, attempting to have children (have children lead adults) entice neighbors to improve their environment--

Were at Washington and were there a Reading lab, I would organize writing activities around Yard (e.g. accumulating and organizing data, documenting observations; creative writing, etc.

(none)

I anticipate notchange

murals, sun dial, perm. weather stations, flower beds.

increasing: Outdoor reading (special area?)

4.6 Is there any particular thing to do with the Yard that you would like to see changed?

(none)

Some sense of rules as far as care--Each child picking up their own litter.

Size. Reinstitute flowers in tubs and cover the garden so like a cage so can't be broken into. Also a bike cage of some sort so children can ride bikes to school and safely lock them up--something with a built-in lock rather than a padlock of some sort.

not off hand

(none)

No

No

The pond cleaner so you can see into the water

I would like to see all the cement removed. More gardens.

safety of structures as spools--

Way to include animals safely

No

Nothing I can think of at the moment

Not having to see other people's litter everywhere.

No

Some way to have animals on a permanent basis

An organized playing field for those children who relate to those activities.

Yes--to move the gazebo to a quieter spot.
***
(none)

No

No

(none)

(none)

close McKinley. better organize "game" areas. change basketball courts too.

(none)

4.7 Is there any particular thing you would like to see added to the Yard environment?:

Indian teepee out of tree branches

Kickball field

Size! Add rubber tires for P.E. activities. Rope climbing structure

More areas for class size. settinhs to integrate yard activities.

(none)

Animals--Flowers--Fish--Clean pond

More setting areas--Perhaps painted ground areas for games

More unasphalt

More climbing "things." More places to crawl into and hide.

Some areas--Another slide

Animals-- Kickball area--redesigned asphalt areas--Protective fences for the gardens

Animal life

Nothing I can think of at the moment

A class meeting place (contained) away from traffic noises; the swings; safety mats where needed, quiet reading places

No

Animals

I would like to see a picnic table area established for lunch eaters but not in the already established wilderness areas

Yes--1) An overhead protection to the old gardening area, 2) a field storage shed.
***
(none)

Have not observed sufficiently to say

(none)

(none)

Yes, a playing space--marked--for kickball and softball games.

(continued)
Racing lanes--four square--hop scotch.

Yard shelter/laboratory/storage/greenhouse--lathhouse. outdoor theatre.

Outdoor classroom; playing areas for baseball, organized sports; possibly large blocks for construction (with storage sleds (?)); experiment areas--water measurement, etc. Outdoor cooking area (also indoor cooking area).

4.8 Is there any particular thing you would like to see taken away?

(none)

(none)

rocks moved out of way of hut--so sliding kids aren't prone to land on them.

not at this time

(none)

No

No

The SPOOLS--more kids have had squashed fingers, splinters, etc.

No

(none)

Replace spools with more lasting ones

No

No

The teachers' parking lot (I wish it would be further removed) and access to library windows--

No

No

(none)

No
see
(none)

No
No
(none)
(none)

McKinley St. paving

Spools (decaying and unstable)

4.9 Is there any particular element or characteristic you would like to see restored?

I understand that last year there were animals for the children to observe and care for but that the weekend work became too heavy a burden for one person.

(none)

(none)

Not off hand

(none)

Pond really "cleared" of choking plants--garbage--

No

The gardens next to the parking lot secured in such a way that class gardens wouldn't be destroyed

(none)

Circles for games, hop scotch, 4 square painted over

Can't think of any

(none)

No

Sand area

No

No

organized playing field

Can't think of it now.
see
Continued maintenance of climbing structures for the safety of the students and neighbors

Outdoor resource support stuff to meld together with my activities; especially if I am a class teacher

(none)
(none)
(none)

painting of hop-scotch--relay lanes--circles, etc. ins a new areas perhaps

(none)

4.10 Overall, what would you say are the three most successful physical things on the Yard today?:

1. the pond, 2. the vegetable garden, 30 the shelter, 4. the character that has developed through the use of the fence, trees and paths.

pond. Road way for cars. Live animals. Because the kids seem most interested in them.
from kids point of view: play structure, ponds, From mine:
wild areas along borders, garden, ponds. Because wild areas less disturbed, ponds have all sorts of things to explore.
pond--slide are the only two I can really say at this time. Because they are the most used.
hut, climbing structure, bars. Popularity with children.

All chapparal, dirt areas--Pond--Play structures. These are the areas my class gravitate to with great joyousness.
The pond, the climbing structure, the garden. Because the afford the children the opportunity to explore, respect and investigate the play structure (the kids love climbing on NON-splintering surfaces), the pond, the creek (for playing)

pond area, garden area, nature area in general, however I would like for the bars, sand pile, swings to remain because there are some children who still use them.

Structures, bars. Because children like to play there.

Pond, trees, R.R. ties for classrooms to make circles on for discussion, sharing, etc. Because they add the most interest and potential development.

Ponds, trails, trees.

The pond area, the gardens and the composting. The children really get involved and are a part of a living process.

non-natural: large structure, bars and rings, dirt pile
natural: garden, ponds, large structure

Slide--climbing bars and stack-sacking. These things provide the opportunity for children to build self-confidence in "doing something physical."

Bars, play structure, play house. Because of their appeal to the developmental stage of this age level.

Ponds, play structure, dirt bank area. These are areas which children are using their creative play ideas--free to do things.

The ponds, the natural planted communities, the structure. (1) and (2) for study purposes, add (3) because the children enjoy it.

Water. gardening and sand

Composting stations, the gardens, the climbing areas

They draw children closer to the life processes--and planting area permits use of excessive energy positively.

pond, play structures

(none)

From my limited observation, the climbing structure, the bars, the pond. Because all three actively involve the children, they can be involved in activities without and adult input or help.

Dirt area--ponds/woodland/meadow/veg. garden/ slide

Pond, garden areas, play structure. Pond and garden: excellent curriculum source areas; play structure; challenging to imagination as good for large muscles.

4.11 Suppose the authorities decided to demolish or close the Environmental Yard. Would you defend or oppose that decision? What arguements would you use to justify its existance or demolition in a hearing on the issue? Speak from whatever points of view you feel are most pertinent.:

I would oppose the decision. I feel that in time it would be a natural setting for nature study, biology, gardening, bird watching etc. besides recyling, littor parade, etc.

Defend--Mainly of the basis of inter-personal relations.

I would oppose it, of course. I would cite as evidence how yard is used by teachers and kids and attitudes of kids. I would insist authorities make a visit here and to other schools and see how school yard is used.

The Yard adds to the child's experience. Since education is supposed to enrich and add to the child experience, closing the Environmental Yard would limited the kinds of experiences a child could have at school.

Oppose: tie in with curricular areas and basic skills is so good as a motivational factor--children made aware of environmental factors affecting our area of world, by seeing these factors in operation on yard. This prepares them for living in todays' world--variety of play areas gives children chance to use diverse interests in satisfying play activities.

I would oppose the decision. My main argument would be how the maintenance of the Environmental Yard enhances the quality of life for the children. How it affords opportunities of awareness using all senses, how it shows the balancing of the forces of nature and how it opens their minds and eyes to the entire concept

of what is an environment. It brings them closer to themselves, their bodies, their needs, and how to live together with themselves, others and nature. It makes all areas of curriculum more meaningful--they can see for themselves why they need to learn to read and compute--in order to understand why things happen and thereby it increases their motivation to learn.

Defend of course! See allcof what I've written in this questionnaire.

It's calming, beautiful, a bit of green in a city. Children help to plant trees that they can watch grow.

I would defend the decision because the E.E. Yard lends to just as much learning or more as the traditional way. It trains young minds to become aware of his Environment and by that, maybe he will not destroy the Environment as much as we have.

Effort, time, involvement of people to develop--the need too--

Defend: The yard is a mini-world for children to experience life, survival. I relates learning from the classroom to inner and outer spaces.

Oppose: Attitudes of the children and especially their behavioral changes. I really feel there is less hostility between the children. The wider variety of activities available to the children that a "normal" yard does not offer.

I would defend it in terms of the children and our responsibility to share these areas of knowledge with them to broaden their perspective and hopefully sensitize them to the growing importance of E.E.

City children, esp., need more, not fewer, places like this. I feel the most important reason is to me the least describable. The kind of spaces we have available for our growing-up years effect the kinds of adults we become--our inner and outer peace, our carings, appreciatings values, feelings of self-worth.

I would oppose the decision because for most children the yard provides the only experience they have for observing growing things to climb a fence or sit in a grassy spot. It seems to give a feeling of "being away from school" while out for recess, lunch or even before and after kxxchx school.

I would oppose that decision. School is for children (1) Chirldren in this area need desperately the kind of environment the yard has to offer, (2) The yard brings out the warmth and responsiveness so desirable from the neighborhood--People feel at home here.

I'd oppose demotion as it serves several definite purposes 1. It has definite maximum educational value in all areas of the curriculum. 2. It is a great place for children to play and be creative. 3. Aesthetically it is pleasing to have. 4. It offers alternatives to children who don't like to play sports.

Oppose: Arguements: (1) It's important for children esp. urban ones, to have a yard like this--to be in touch with what's natural (2) WEY eliminates the work-play dichotomy and makes learning fun. (3) WEY encourages creative play and brings out children's natural curiosity. (4) WEY enables the teaching of EE to be initiated right on the child's own school yard, instead of having to take a field trip to see the natural world someplace else. see
I would defend the yard. This yard supports an ides of beauty, and respect and understanding of our place in the universe. It brings the child and the adult in close association with the outdoors on a dialy, regular basis. It supports the teaching act in a broader concept of the education of the young child.

WE've covered enough of the world with cement. Survival may demand one day that each of us know what and how soil conditions, plants, can keep us alive. Our inner harmony is helpfulled by nature (why else do millions travel to state parks yearly?) The growing of things shows our human connection to the life cycle.

I would oppose that decisi n--WEY contributed greatly to ? non-competitive play activities, fosters awareness, curiosity, re. environment, and itself to many learning activities--structured and non-structured, helps develop caring, sense of immediate and personal responsibility for natural surroundings.

I would definitely oppose it. The Environmental Yard provides children with opportunities to absorb knowlege through firt-hand real experiences which allow for clear connections between everything that is taught.

It is like a pocket park--important to inner city children--can be used as a community resource

Oppose: It's the greatest way to educate the children and adults with an awareness of our environment, our resources, our community. It is bound to affect those who are here in a most positive way--to make this a better place to live--and give more meaning to our lives.

Defend. It is a basic resource for developing a good curriculum. Reading and math skills are very important, but can't be learned in a vacuum; there must be something of value to read and some reason for using math. Natural science activities are of high value because they interest so many children--also so important.

4.12 Discuss any other thoughts, suggestions, ideas, criticisms, etc. you might have relevent to any of the above items.

I have enjoyed having the Yard here at Wahsington as part of my classroom assignment. It really adds an extra dimension to a child's day to feel that he can use the yard as play space as well as having it as part of his learning environment.

Again I feel the kids need to know their limits and also should be taking care of their own clean up of garbage, etc.--

W Would hope to see school wide litter parade and recycling continued--important social responsibility training, I feel.

(none)
(none)

Because of our yard I have seen my students come to realize we are all living things and need to be nurtured--to realize and see what happens when we neglect aspects of nrturing and for me to see how the yard experiences transfer to their daily loves and to see them living these experiances and making them a part of theri very being has been a joyous experience for me.

I wish I could give you more input but since I am not here on a day to day basis and my use of the yard has been limited I could only give you such a minimal response.

I personally enjoy it a great deal.

(none)
(none)

All covered

(none)
(none)
(none)
(none)

As a teacher, I need less pressure from other areas and more time to use the outdoors to develop a meaningful learning environment using the Yard.

(none)
(none)

I would like to see a more inviting view of the yard from Grove St. The view is not as pleasing to my eyes as I would like to see it. Once inside the yard every beautiful feeling engulfs you. The adventure is in side,

"To see a world in a grain of sand" is a famous thought by William "lake--The environmental yard could bring a child's step firmer onto our universe.

(none)
(none)
(none)

The WEY should not be unique as it now is bgt should be implemented in all the school systems at all elvels.

Hope to find some way of developing a really first-rate resource center to support this program. The start is good but could go much farther.

-end-

APPENDIX P

Parent Questionnaire

1. Sample of Questionnaire

2. List of Responses

WASHINGTON SCHOOL

June 4, 1976

Dear Parents:

Back in 1971, as part of the community planning input to the Washington Environmental Yard Project, parents filled out a questionnaire similar to the one attached.

Many of the desirable changes requested in reference to the then totally asphalt yard have been made in the years since then. Now it is time to come back to you -- a largely new community of Washington parents -- to solicit your perceptions and response to the Environmental Yard as it now exists. Your thoughtful, concise answers to the questions below will be greatly appreciated. A summary of them will form an important component in publications now being developed. The identity of individual respondees will of course be kept anonymous.

Since school will be out Thursday, June 10, we would like them returned to the school no later than Wednesday, June 9.

Thank you for your consideration.

Sincerely yours,

WASHINGTON ELEMENTARY SCHOOL

Dr. Herbert H. Wong

HHW:kb

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

Your Address:_____

1. Approximately how many blocks do you live from the school?
   0-2 blocks ___, 3-5 blocks ___, 6-10 blocks__, 11-20 blocks__ 20 or more blocks___
   Please check one

2. Your sex: Male____ Female____ Your nationality:_____

3. Number of children in your family?____ 4. Number of children presently at Washington School_____

5. How long have you been a parent at Washington?_____

6. Have you ever visited the school?_____ 7. Have you ever had a look at the Environmental Yard?_____

IF YOU ANSWERED "Yes" TO EITHER QUESTION 6 or 7 PLEASE CONTINUE. IF YOU ANSWERED NO TO BOTH QUESTIONS, PLEASE STOP HERE. THANK YOU.

8. What do you think is good about the Environmental Yard? (Be brief, and specify which part(s) you like.) _____

_____

9. a. What do you think your children enjoy most in the Yard?_____

b. What do you think yourchildren like least?_____

10. Who do you think the Yard serves best now? (For example what group, boys, girls, adults, etc.)_____

11. Who do you think the Yard fails to serve adequately?_____

12. Do your children ever play in the Yard after school? Yes___ No___

13. How often, for how long?_____

14. Have you noticed any positive changes to your child as a result of using the Yard?_____

15. Have you noticed any negative changes to your child as a result of using the yard?_____

16. Do you ever use the Yard for your own activity? Yes____ No_____

17. How often, for how long?_____

18. Do your children ever play on the Yard on weekends? Yes___ No___

19. How often, for how long?_____

20. Do you accompany your children to the Yard? Yes____ No____

21. If "Yes", do you play with your children when you accompany them to the Yard? Yes___ No____

22. What do you think the Yard should be used for?_____

_____

23. What further changes or additions would you like to see made to the Yard? (Let your imagination run wild and pretend that money is no object.)

_____

_____

24. What is your visual impression of the school?_____

25. What does the phrase "Environmental Education" mean to you?_____

_____

26. Do you think Environmental Education is important?_____

27. What do you think kids can learn while they play?_____

28. What do you think kids can learn as well out on the playground as they can in a classroom?_____

_____

29. What kind of environment do you think is the most educational for elementary school children?_____

_____

30. Please use this space to say anything else you want about the Yard, the School Buildings, Environmental Education, or learning and play.

_____

_____

_____

_____

Please return this questionnaire to school, to your child's teacher. Thank you for your cooperation.

(If further space is needed for your answers, please use reverse side)

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

8. What do you think is good about the Environmental Yard? (Be brief and specify which part(s) you like.)

* Yes, because it give my child more to do on the schoolyard than the usually.
* Size of the Yard is large enough for children to run about.
* blank
* children love it
* Very thoughtful, my girl talked about it often.
* Free roam, good natural environment and play structures, I like the pond.
* ditto
* The pond is the best part of all for kids to get into it.
* The waterfall drowns out street noise. Hard to describe--it shows the kids that "natural" is more interesting than cement.
* Ponds, paths, plantings--the mix of asphalt and traditional climbers with the more natural side of the yard,
* (blank)

I like the "natural" playyard with the lakes, streams and vegetation.

* The flowers and pond with bridge.
* I love it all!--ecpecially the fountain with waterfall and pond with tadpoles!
* (blank)
* Variety--water--growing things.
* The pond area is very attractive to me. I have'nt seen the children there or how they use it, but it's great to have something like that for them to relate to in the city. Things growing, etc..
* Variety--
* Interface of urban/natural systems, good play structures, opportunity for random interesting exploration.
* Positive
* (blank)
* The garden and the pond.
* Garden, non-concrete areas, ponds--areas that city children often miss.
* The variety, plants, imaginative structures.

#8 WEY PARENT QUESTIONNAIRE

* Bars and rings, flowers, pond (answers given by child) First parental observations: variety and naturalness.
* (blank)
* It feels organic and durable; and it's so easy on the eyes.
* Provides alternatives to boring blacktop; natural environment of plants, woodingsclimbing things.
* Ponds and bridges; more structures for climbing.
* I love the trees and the pond.
* The variety: lack of concrete.
* Greenery, garden, getting off the pavement.
* Ditto (blank) same parent
* (blank)
* It's strikes me as a well-intended, poorly executed, underfunded project lacking comprehensive planning and follow-through.
* Child has chance to be imaginative, not many set games on yard (i.e. hopscotch,etc.)
* The small combination of animals, ponds, plants--I like the country-like scene.
* Especially like thh pond and path green area--the variety.
* (blank)
* "
* It is much better than hard asphalt. It presents natural beauty and processes of natural things, It is something which develops and has a history so thet kids can be constantly interested in what's going on in it.
* It exposes the children to nature.
* The pond, the bridge, the trees.
* The fact that it brings all the student at different levels together--the sense of communtity
* N Natural and interesting and probably relaxing to kids.
* I like having variety instead of all asphalt--having some nature to enjoy and explore.
* Water, plants.
* Asphalt area for good climbing structures and also natural areas for exploring and different kinds of play.

3

#8 WEY PARENT QUESTIONNAIRE

* Wide range of activity sites.
* Pond, evergreens, rocks, feeling of being out in the country
* The pond and the animals, and the trees.
* The trees and other plants, the pond.
* Relative seclusion of pond area (plus diverse terrain), ponds themselves, open 24 hours, climbing equipment, and the whole bungalow play area.
* It's Hopeful in the this concrete world.
* Water, variety of plants, small shelter, kids being allowed to help.
* Active; learnigg experience; children enjoy it.
* The vegetable garden and the pond.
* I particularly like the landscaped areas.
* Gives a nature area for study and play.
* The specific fact that it is unique to most public schools in the Bay Area.
* Has some greenery, some dirt, some life!
* The waterfall.
* Variety of visual, textural, space perceptions--feeks more real than asphalt.
* It looks better than the blacktop.
* Garden and pond area, especially the pathways aroung the trees.
* The bridge and pond and vegetable garden.
* The grass, the water, the trees.
* It has life! It's green, it smells good; it grows!
* There isn't any one specific area that I like better than the other I think the overall concept is good.
* (blank)
* The fact that it has green living things,
* Ditto
* Ditto (same family)
* Engenders curiosity on part of parent and child; interaction with objecct and nature; fun and learning combined; child teaches parent; growing things can perpetuate self-growth.
* Variety of plants; pond-eco-system.

#8

* Do not like it very well. Too dirty.
* Ditto (same parent)
* I think what you have now is good.
* Plants, climbing things--everything.
* The pond. I'm a fisherman, like water things thus cna identify with kids digging pond.
* I don't particulary like it.
* (blank)
* Nice--My child likes it very much.
* Allows children to experience nature daily and has made them aware of how changes can be made by a group working together,
* The number of kids in it. The log-seat facing the bridge.
* Variety of play areas and pleasnat surroundings (natural environment)
* The availability of asphalt, dirt and water areas.
* Ditto of one above
* (blank)
* Variety, free-expression, life, places to be, challenges, points of departure, fantasy place.
* The freedom, and the experience that children get to see things grow.
* The ponds, trees, vegetable patches.
* I like all the yard.
* I like the nature area, the little pond
* I'm sorry, I never did have time to visit the Environmental Yard.
* Pond, spools, gym bars, gardens.
* Variety, possibility of more privacy.
* It gives the children a natural setting to explore that otherwise would not be part of their education.
* The lack of asphalt, the opportunity for the children to play and learn among growing things.
* The variety of activities open to the children; The educational uses
* Not all asphalt, lots for the kids to do--water, dirt, mud, green, climbing.

WEY PARENT QUESTIONNAIRE

#8

* I like the idea that it has community planning--not a copy of other school yards.
* Variety, growing things, water things, climbing things.
* The ponds, "house" up in trees, animal pen was superb. Vegetalbe garden areas near school--trees.
* Fish pond.
* Replacing the cement yard. All subjects relate to the environment
* The basic idea, the variety of things put into a small space, it is not hostile to living things--like children.
* I like the vegetable garden.
* So many different kinds of areas. The trees, plants, ponds.
* Total
* The idea of a yard half concrete, half natural.
* Garden
* I enjoy the pond.

217

WASHINTON SCHOOL PARENT QUESTIONNAIRE

#9 a) What do you think your children enjoy most in the Yard?
b) What do you think your children like least?

* A) Fish b) The kids getting dirty and falling in the water
* a) I think running about, etc. b) Plants in the yard.
* a) blank
* a) everything b) nothing
* a) The pond and the green garden, the little animals
b) She seems quite impressed.
* a) Climbing bars, flowers b) The pond they say it's "muddy"
* a) Same parent
* a) The plants she planted b) the water pond
* a) The small fenced spaces,"private" places between bushes.
b) Not enough grassy places to sit, just dirt.
* a) The variety of things to do and see b) I don't know
* a) The dirt yard b) blank
* a) Playing with the other children b) Nothing
* a) Ponds b) Dusty area next to cement
* a) The same (as answered in question 8: the fountain with waterfall and pond with tadpoles)--plus animals and vegetable and tree garden; plus the "tree house" (with ladder) which is nice for picnics.
b) (blank)
* a) weeding water b) He likes it all
* a) Bars b) the house (hurt herself jumping off of it)
* a) Don't know b) (blank)
* a) The meadow--trees and pond. b) (blank)
* a) the bars, the dirt yard. b) " thw wooden structure in the dirt area- and large climbing slide structure <u>when crowded</u>"
* a) ? b)?
* a) Enjoys the gardening b) Pond
* a) The pond b) (blank)
* a) The new barrels b) (blank)
* a) Pond, bars, spools b) Large pipe?
* a) Bars, rings b) nothing

#9 a0 like most b) like least

* a) Free choices b) being pushed into pond

* a) The water and the forts b) ?

* a) The ponds b) The lack of swings; sometimes it's muddy

* a) The structures b) Too many children there at one time

* a) Playing by the pond and with the animals and the spools
b) The bars and the "pond is too muddy"

* a) the pond--unfortunately b) can't imagine

* a) pond b) nothing

* a) the slide structure b) (blank)

* a) pond b) spools

* a) Don't know b) (blank)

* a) Bars (direct answer from child), pond area (assumption)
b) Slide ("""""")

* a) The pond b) Nothing

the pond and the bars b) ?

a), b) (blank)

\- a) Everything b) When I tell him it's time to come in

* a) Watching the flowers, water under the bridge. b) ??

* a) bars b) slide

* a) the pond b) the gazebo

* a) the forest-like effect b) (blank)

* a) Everything b) nothing

* a) The mud aroung the ponds, the pond itself, and the rings and little private places. b) He likes it all

* a) water b) (blank)

* a) the pond and dirt b) the slide area

* a) My son says, " the dirt" b) Big logs surrounding center construction

* a) water, tadpoles, climbing on rocks b) mud

* a) the dirt area and where the ponds are b) sometimes a child is thrown in the pond

* a) the pond b) the splinters!

WEY PARENT QUESTIONNAIRE

#9 a) like most b) like least

* a) Bars, rings, pond, bungalow area. b) WEY used as a bicycle speedway, fighting, intimidation, hustling,for money, older kids abusing playground

* a) They like soccer and basketball b) hopscotch

* a) ponds b0 asphalt (except when they want open space for bike riding during non-school hours

* a) Dirt area for play and the pond b) basketball and soccer courts

* a) the pond and growing things b) (blank)

* a) the pond and individual class gardens b) I don't think anything is liked least

* a) the dirt area b) too crowded

* a) the pond and the animal farm b) no idea

* a) same as mother: has some greenery,and dirt, some life!
b) the play bars

* a) the pond b) the large pipe

* a) One fishes in pond--Other plays hide and seek when not playing basketball b) crowded circumstances; kids obviously being exploited of environment

* a) the stream b) the dusty dirt

* a) the pond and climbing structures b) too much pavement

* a) dirt area b) little metal things

* a) the dirt area where the pine trees are b) the place where all the stones are

* a) the pond--open space to run b) the fence

* a) the small farm area b) (blank)

* a) pond and animals b) trash

* a) the pond and the gardens b) the mud

* same parent

* same parent

* a) Participation in growing; raising and building things; learning about nature and environmental conservation
b) gymnastics bars could be improved for health and safety

* a) the pond and private, hidden places b) trash being thrown in the pon

* a), b) (blank)

* same parent

#9 a) like most b) like least

* a) Dirt area, slide, pond b) (blank)
* a) Pond! b) N/A
* a) Pond to look at - the wildness b) It's dirty - papers etc. - thrown around
* a) Dirt area, pond, slide b) (blank)
* a) Ponds, bushes, bars b) basketball
* a) Everything. Lake b) unknown
* a) The water b) The splinters that's all
* a) The bars b) the basketball hoops
* a) The garden area, the animals that are occasionally there, and the pond. b) The area by the bars.
* a) Around the big pond b) the basketball hoops

a) (blank) b) (blank)

a) Pond, trails, climbing, role playing b) fights

* a) The pond where the fish are b) I can't think of anything my children like least
* a) Fishing in the pond b) She likes everything
* a) Pond b) (blank)
* a) The bars b) The round circle
* a) The pond b) the bars
* a) Spools B) empty spaces, soccer fields
* a) Water - which I don't approve of b) Can't answer
* a) Climbing on the structures and the pond b) the cement
* a) The plants and growing things in general as a source of knoweldge and pleasure b) they say they like it all
* a) The expansiveness and water area b) (blank)
* a) the pond b)the fence
* a)Pond, rings b) (blank)
* a)1.climbing things,2kickball, 3. crater places b) I don't know

#9 a) like the most b) like the least

* a) Helping make it--ponds--ducks--stream b) Bridge--should be bigger
* a) fish pond b) spools, tabletops near the entrance of the yard
* a) gardening projects and the pond study b) cannot remember any complaints
* a) climbing things (bars included) and the pond b) They like it all
* a) All of it, especially ponds b) I don't know
* a) Bars, dirt area b) stack sacks
* a) gardening b) not known
* a) the spools, the brook, the ponds b) the mud
* a) garden b) paintings
* a) the pond b) the sand area

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

14. Have you noticed any positive changes to your child as a result of using the Yard?

* Begin to love plants and nature.
* She enjoyed gardening in the fall.
* Greater physical independence, I think.
* I think they play outside more.
* Interest in gardening.
* More athletic and agile; awareness of plants.
* Good awareness of plants and animals.
* Has become more interested in outdoor thing - fish.
* She shows a real interest in her "play" area at school which I hadn't noticed before.
* They are much more eager to play there than in other school yards they have experienced.
* There have been no negative changes, but children are constantly changing.
* Yes, interested in planting.
* An increased perception of growing things. An increased awareness of why not to litter.
* They think Washington School looks like the best school in Berkeley and want to continue.
* When he took the recreation nature class he was really happy about what he learned about the yard - also he is very proud to show me the changes that take place there.
* Greater awareness of small creatures.
* Yes, he loves it, he enjoys playing there everyday at lunch, he loved planting a tree. It's wonderful that he has such an area for lunch time play.
* Enjoys staying after school. Likes nature study.
* Less hemmed-in by urban structure (streets, etc.)
* It pleasures them to have it near. Makes them proud.

* Hard to say - Washington in general has helped.
* Yes - great learning experiences.
* An increased awareness of nature.
* Free feeling.
* They really love playing outside.
* More active.
* Yes: curiosity, exploration and physical growth.
* More awareness of pond life.
* Not really! She dig it from start! It fit her own life style in "K".
* Interest in plants, she is collecting.
* No. Well, he did put together his own aquarium.
* They enjoy the yard.
* He dislikes schoolyards that are paved.
* Increased and comfortable knowledge of natural things.
* Not as many hostilitiesas in past years on the yard.
* Yes - much more interested in environment and plants.
* Yes - awareness of environmental studies.
* More interest in gardening and in insects and fish.
* Brought guppies home from pond and was interested.

15. Have you noticed any negative changes to your child as a result of using the Yard?

* They say it's"tough"
* Complaints about fighting.
* No (except he was disappointed when the plants his class planted were covered over).
* Fearful of running into strange kids, black kids or older kids - they expect hassling AND frequently get it!
* Always come home WET. This is very bad - laundry, ruined shoes, etc.
* Daily mud and muck on my children's clothes!!
* Always dirty.
* She always complains about boys chasing her in the yard.
* Getting wet and dirty.

#22. What do you think the Yard should be used for?

* Play, Culture, Sincere Projects andmore places to explore.
* No Answer
* No Answer
* play & environmental studies
* Education, culture
* Free play or work; Concerts, Theater, Dance
* No Answer
* Use as part of the classroom
* some playground equipment incorporated into it.--lots of things
* play, exploration, nature study
*
* A safe and near playground for families
* An experimental area for children. To see things grow, etc...
* Just to be there!
* Just what it is being used for
* community
* no answer
* No answer
* whole-systems curticulum, natural studies, spontaneous play
* Playing
* Exactly what it's being used for
* the yard is being used exactly as it should, for the better of children
* To give children access to gardening, ponds (mud, etc.), play areas their city homes don't have
* play, learning about plants
* School activities(like the Yardfest), perhaps more(& better publicized) community events
* As used now/ good for community to plan continually help & change it & good open after-school & weekends
* Creating an area where the children can space out & relax.
* for fun, organized games & free play
* A"play & learn" area for recess & after school.
* For a natural comfortable play area for the children. All the concrete should go.
* School & neighborhood recreation center
* Some quiet spaces some intensely active. Innovative games; fantasy
* A playground for the children of whole community.
* No answer
* No Answer
* recreation, exploring and learning
* I have no complaints about what it's used for now
* play
* No answer
* No answer
* I think it should be primarily used as a park, that is, for relaxation, for joining with nature in a free informal way.
* recreation and nature studies
* No answer
* play & education
* A play yard
* children playing
* Kids to play
* No answer
* play and learning

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#22. What do you think the Yard should by used for?

* after school & summer (creative & supervised) recreation--also physical ed. during school year (structured climbing, running)
* recess and lunch play, environmental studies of plants & animals
* Mostly for studying plants and animals
* a park--recreation area for community--expanded gardening areas
* Refreshing ourselves among growing things
* a place for both active & passive "playtime" for both children & adults
* Just what it is used for now
* just what it is being used for
* Supervised play and teaching activities, both during and after school hours
* Play & learning area
* Community activities on the weekend
* present purposes
* No answer
* 1) Kids at school to play 2) Kids whenever
* To show how everything in life is connected to everything else.
* Play--exercise--& peer involvement in cooperative projects
* No answer
* Parent--child play
* A nature study area--it could be arranged for more quiet play areas. Now, running & water play is all that seems to be available.
* No answer
* Learning & recess
* playing and growing things
* " " " " " (same parent)
* " " " " " "
* As now (growing things, creative structures) & improvements suggested above.
* learning & recreation
* No answer
* " "
* For the children to play or study
* the way it is
* ?
* Nature studies, extension of the classroom-
* the way it is (same parent above)
* Learning and Play Area
* good times
* At weekends a supervised place
* recreation, gardening
* To provide the children with a pleasant environment to learn in and to relax in.
* recreation, gardening (same as parent above)
* No answer
* Fun and education
* Building and growing things the children enjoy
* recreation, relaxation community events
* play
* Whatever
* No comment
* gardening, animal care, athletic uses, fairs
* Children of the school. I would restrict other uses (older kids,etc.)

222

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#22. What do you think the Yard should be used for?

* for the school children during school hours & open to the public afterwards
* Its present uses plus, perhaps, more public events
* No answer
* Children, and their parents--not loiterers and hot rod bicycles
* No answer
* What it is used for now
* as a park would be used
* Environmental Education
* As is and extended and added on
* play, exploring--should be used as a park for younger children
* Park in summertime and after school hours--also for classes (nature)
* A children's playground
* All activities scheduled in neighborhoods
* recess & after school recreation (for children)
* to play ball and keep the kids off the streets
* Recreation, and a learning environment

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#23. What further changes or additions would you like to see made to the Yard? (Let your imagination run wild and pretend that money is no object.)

* I think there should be a place where girls can play with peace and not get too dirty.
* No Answer
* " "
* " "
* More lands, should created better background.
* More supervision in cases of child threatening child. Perhaps high school students helping
* Grown-ups or or High School students helping kids work out personal friction while out on the yard.
* No answer
* better supervision--fewer weeds--more flowers, big trees--climbing structures--is the water clean?
* A variety of native plants which children could study in place, learn to identify and name, notice similarities and differences.
* I don't know. She has a yard at home
* Expansion of the "natural" area with additions of more trees & flowers. Supervisors (high-school or college kids, perhaps) to watch out for the children on the lakes. (ect)
* A green house addit
* Lots of flowers, birds, monkeys, bamboo
* No answer
* More gymnastics--dance--
* A sand pile, swings. More trees, on what now is asphait. A place where teachers could relax outside.
* Swings
* tunnel maze of concrete piping opening riparian grotto rope--network to climb on near big structure over rubber foam
* raise earthworms
* No answer
* Something to add a shade area or shelter for shade.
* Trees. individual garden plots for those who want them, camping area, swimming
* more plants, swings, animals (chicken, llama goats, sheep), slide, swimming pool, tennis courts, handball court
* "A sand place"; "swings"; "more flowers"; "a swimming pool"; "a play house"
* No answer
* I would like a wet sandy beach-front where the children can create gullies, castles
* build swings; put stepping stones in muddy paths & plant a low ground cover in between; have some area as a garden that the kids can plant in.
* I would like to see the ponds improved to make them safer for smaller children.
* An aviary should be added as well as replacing the remaining concrete. Also add some swings & slide.
* Animals in yard, more flowers, kickball area
* glass dome greenhouse, a resident naturalist
* soil ground, flower gardens that children can take care of, Swings.
* No answer
* Make it look finished. Running water everywhere. Trees that the kids are allowed to climb.

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#23. What further changes or additions would you like to see made to the Yard?

* more animals, more water, more trees, bridges, semi-jungle-forest type atmosphere
* more animals (baby)
* I loved the animals you had last year--more tree houses
* No answer
* " "
* I think a waterfall like some of those in G.G. Park would be even better than the large rather stagnant pond. More flowing water, making beautiful sound. I think you would need less area occupied by water this way. Maybe bird feeders to attract specific birds in different zones of the yard, etc. Making it attractive to squirrels.
* Swings
* No answer
* More care--more adults or teens to work with student & yard
* Flowers & trees, boat trips, a horse
* a big lovely lawn to sit on & roll on & do tumbling on & look at.
* After-school Rec. program should have more activities there.
* Swings & possibly keep a few animals during the school year like were there for a short time last year.
* swings, balls to use, jump ropes to use, soft mat section for body movement and exercise.
* fruit trees--greater opportunity for individual children to plant things--more enviromental ed.
* make more of the playground--my child would like the litter to stop
* More animals. More organized growing of vegetables. More trees.
* Wading pool, huge snad pile, picnic tables (or study work tables), safely designed swings
* I want it to be so grown up on Grove St it blocks traffic sound a Japanese Garden section for meditation & quiet games.
* Roof type shelter from rain & sun that people can picnic under or just observe from--maybe multi-level structure.
* Large 20' high hedges surrounding the yard to confine the impression of "farm"--would serve as a good wind barrier too.
* More trees--a larger area--spots for sloitude--caves--
* No answer
* A protected garden area and animals that kids could care for.
* No answer
* Maybe a very well supervised swimming pool and 4 or 5 really big trees
* No answer
* extend it 2 city blocks to a field, forest, etc.
* Add some dwarf fruit trees.
* Snakelike planting strip for flowers which would create a maze out of east asphalt area.
* All dirt, some flowers, swings, slides, seesaw, animals, grass.
* Another bigger waterfall, wildflowers
* more trees! animals! More gardening--more grass--a longer sand beach; huge pile of big rocks for rock climbing--hidden fencing--more wild flowers--better marked paths--cosier shelter--campfire circle for sleep-outs & star gazing.
* No answer

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#23 What further changes or additions would you like to see made to the Yard?

* No answer
* It might be nice to have old wood so the children could build sculptures (or anything) like we have down on the mudflats.
* Ditto (same parent)
* " "
* Swimming pool, more space for growing plants, flowers, fruit trees, a little "jungle" habitat, & see above.
* Integrate climbing and swinging structures with "nature" parts. Build more little ecosystems like the pond, grassland, bushes, grove of trees. Let the children grow food and then let them eat it. Provide tools and space for digging in the dirt.
* No answer
* " (same parent)
* I think the Yard is fine now the way, as it is.
* more climbing things--
* " " " (same parent)
* more & more & more! Bigger & bigger & bigger.
* A special place for children to eat their lunch.
* More trees and plants.
* more flowers something like peas along the fence for kids to eat at will
* An Art Center where you could leave your children for a few hours after school & at weekends
* More earth & grass & greenery
* Ditto (same parent)
* I would like to see some trees and a free-flowing pond that could have fish & other water animals. Also some grassy area for romping & rolling around
* No answer
* Alternate energy sources, meterology station, bird feeder & bath, modular building materials, shop, theatre, tent.
* I would like to see little animals added so that the kids may also learn about them.
* some grassy patches somewhere to relax on.
* No answer
* A swimming pool
* No suggestions
* more things to climb on, more tables, more places to eat
* Bulb garden--fish farming (tilapria (?) or catfish)--herbs & their uses
* More greenery--grass field
* No answer
* expansion of green area
* take up some more asphalt--fewer children all at once--more adults.
* a bigger & better wooden climbing structure--a stretch of grass for sitting on
* picnic & volleyball
* less asphalt--grassy knolls, sandy beach areas, real "animal farm" animal area
* Improve the landscape and condition of the area.
* Larger pond area with waterfall. Grassy area to sit.
* grass to lie on; swings
* A Battle ship to climb on. More pretty flowers, the goat again, Pony rides. maybe a piglet, & more bridges.

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#23. What further changes or additions would you like to see made to the yard?

* Big trees and grass
* N/A
* farm animals (goats, chickens, rabbits, pigs) were fun. Pretty flowers would be nice. Also a climb-in-or-on sculpture
* removing the water area
* a supervised baby animal farm like Knowland Park Zoo.

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#24. What is your visual impression of the school?

* very well school
* N/A
* "
* good
* good school, new idea
* Homey
* " (same parent)
* It is really something different from other schools.
* ? not sure what is meant
* The building is standard. The Yard is attractive.
* A cemented prism
* Friendly
* N/A
* I love it!
* You have done much with very little.
* N/A
* At first struck by the 'city' school quality--the asphalt. Now don't notice it.
* Yard yeah! building--drab.
* big concrete box w/a secret forest near it
* OK --like banners
* N/A
* "
* pleasant, well used
* mediocre
* lovely
* Great
* tidy & sensitive, etc.
* its very nice
* clean--there seems to me to be too much running in the halls
* I love.it.
* boxy
* more grass
* buildings are all right. But the Yard is too small and empty.
* N/A
* Favorable from Bancroft; a dump from Grove.
* eye sore
* children well disciplined & teacher concern.
* the bldg. is a bit dull
* N/A
* "
* Except for the E.Y. it is very bleak. I think it could use trees around the entire perimeter. paint on the green stucco.
* N/A
* "
* it looks cared for
* I like it.
* it's not much to look at but the yard helps.
* good--env. yard makes it much better
* An old structure & innovative yard.
* outside--nondescript inside--exciting and lively
* pleasing blend of natural & traditional activities
* pleasant & warm
* Much better than it used to be!

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#24. What is your visual impression of the school?

* square-brick, stinky
* ALIVE
* 1.)box shelter structure 2.)hard surface, hard structures to play with 3.) soft surface play area
* A bit messy but interesting
* a soothing happy busy place
* The bungalows and yard are most pleasing. Although individual classrooms are pleasant, the exterior of the main building is not particularly so.
* N/A
* Unstructured
* Great!
* N/A
* blah? except for yard
* Well used
* Too much clutter--viewed form Grove St.
* good
* an innovative learning environment
* not so good
* It is the ideal elementary
* good
* It's lovely.
* " "
* " " (same parent)
* The yard is a trip.
* Much less sterile and dangerous on the environmental end than before.
* N/A
* " (same parent)
* good school
* N/A
* " (same parent)
* ? Like it?
* bad
* Good
* interesting
* N/A
* pleasant
* " (same parent)
* warm & comfortable
* N/A
* great
* Great, Fantastic
* yard great, building needs some "happy" paint on outside
* The school is very good.
* very good
* Very good
* very pleasing to the eye
* wonderful
* N/A
* Airy and pleasant
* N/A
* the building is ugly, maybe paint would help a bit--

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#24. What is your visual impression of the school?

* OK
* very good
* very positive
* Good--can improve outside condition
* Excellent
* very pleasant--non-institutional
* O.K.
* Very exciting
* Good
* rather plain
* N/A
* innovative

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#25. What does the phrase "Environmental Education" mean to you?

* being educated on the nature around us
* N/A
* "
* Life & condition of living
* Preparation for life
* " " " (same parent)
* N/A
* teaching people the limits, possibilities & pleasure of the natural environment
* nature stud , The study of "man's" place in and effect on the chain of life
* it's better than nothing
* Teaching the harmony & understanding & the function of all other life forces and surrounding to man.
* Teaching children how our world of living & non-living things depend on each other & how they function
* Teaching the appreciation, uses, care of, protection of the physical world around us.
* Being aware of the natural things around us/you.
* Becoming conscious of our misuse
* It means teaching awareness of the environment--respect, concern for it.
* Learning the value of protecting natural resources.
* learning how we participate in our environment, observing how other beings do it.
* picking up trash for five-year olds
* Learning about what's around you.
* Nature study
* Becoming attuned to nature, learning to enjoy & preserve it.
* Study of environment, nature; also, learning through an enriched environment.
* Learing in and learning about one's surroundings (????)
* Seeing/playing/working in spaces for & by kids to create & learn about ecology planning to make our urban space usable & to conserve energy--etc.
* ?
* recognizing the living organisms that grow naturally in the world & their importance
* Teaching children as well as adults how to take care of their environment.
* Imparting a sense of the realities of plant & animal growth vs. concrete.
* Jargonese for learning about the physical world.
* In the city, it means keep clean and natural as much as possible.
* N/A
* Educational jargon used for anything non-academic
* Active participation instead of looking at and listening to, as far as the environment is concerned.
* increased knowledge about natures surroundings.
* how to live in the world without destroying it
* N/a
* "
* Learning how to live in harmony with the Earth, and be supported by it.
* nature study

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#25. What does the phrase "Environmental Education" mean to you ?

* The importance of preserving the environment
* Education that teaches one to live and grow in and with one environment
* Learning about the natural course of the earth.
* learning about your surroundings which includes everything from family & school up to the whole planet.
* Learning about nature.
* Learning how everything relates to each other & has to live together & to respect that.
* Learning about total natural surroundings
* teaching children an awareness of all living things, their importance & our relationship to them--also conservation.
* learning about natural sciences
* study of ecology in its widest sense.
* giving people a sense of multi-level existence
* PRESENSE OF LIFE
* teaching options to how we can surroundiourselves & how to relate to what naturally surrounds us.
* Reproducing a natural or more rural environment to balance the overly artificial aspects of city life.
* children experience nature firsthand
* The stimulation of appreciation and respect for one's environment
* Developing an intelligent awareness of surroundings, how we effect them and are effected by them.
* Educational habitat
* learning how the environment helps us & how we can help the environment
* N/a
* learning about "mother nature"
* become conscious of natural conditions
* integration of child with significant aspects of nature & peer involvement
* teaching awareness of that which is around us.
* learning about ecology and survival
* re-establishing our knowledge of nature
* N/A
* "
* It means that perhaps the children will grow up to love the land and all animals and plants.
* (same parent)
* " "
* Learning to live with and respect nature as a close friend.
* Observing, inquiring, experimenting about food chains, energy cycles, nutrient cycles, adaptation to environments, interdependences, natural succession, etc.
* N/A
* " (same parent)
* Have a good surrounding for the children to learn.
* Learning (?) about and relating to surroundings--nature--stores--etc. (civilization)
* N/A
* Presentation of valuable knowledge not usually in curriculum.
* Teach children & importance, understanding of the natural world around them.
* Becoming acquainted with the Natural World.

WASHINGTON ELEMENTARY SCHOOL PARENT QUESTIONNAIRE

#25. What does the phrase "Environmental Education" mean to you?

* Understanding your world, country, state, city
* Learning from everything around you.
* the physical surroundings are conducive to learning
* (same parent)
* That is an extension of the learning process to the outdoors.
* N/A
* the process of involving people in their total environment
* Learning about things that grow, move, etc.
* teaching kids ecology
* N/A
* How to Preserve our external living condition.
* I don't know
* learning to create & exist within natural settings.
* catch all phrase to label various conservationist trips--some good, some inane
* Teaching children the interelatedness of all phenmenon
* The imparting of a sense of the whole of the context of living.
* N/A
* teaching about the environment--the green environment--the social environment--the asphalt environment too.
* That learning also occurs outside classroom
* learning about nature & the things around you.
* learning about your environment & how to use it wisely with as little destruction as possible--having reverence for it.
* Learning the needs and balance of nature
* The environment of the school is used as part of the core curriculum.
* that children learn about their natural world, their relation to it.
* learning about your environment
* Understanding the way all aspects of nature including people fit together.
* Living Surroundings
* A training for awareness of surroundings, natural or man-built.
* N/A
* A worth while endever in experimental learning

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#27. What do you think kids can learn while they play?

* Nature
* N/A
* "
* new things & building up their character
* much easier to learn
* Care for people/nature. Basics (3 R's)
* (same parent)
* Yes
* to respect nature
* human interaction
* N/A
* How to deal with people on a one to one basis.
* social interaction
* definitely
* N/A
* "
* "
* Hopscotch, Jumprope, Kickball, 4-square
* perception, awareness, the change & movement of inner & outer systems
* sure
* getting along with others
* Not to destroy
* yes
* yes
* yes
* yes
* of course
* learning only happens when there's a pleasant association--yes!
* how to take care of their environment while they play in the yard
* Why the short blanks?? to have a great time.
* Peer relationships
* cooperation but not competition
* Relax and being friend with nature.
* How play with each other.
* Don't see how they can help but learn.
* Not to lose imagination which leads to free thinking which is an opposite of narrow-mindedness
* to respect their environment
* social attitudes
* N/A
* "
* I think playing is a pure activity which cannot be fruitfully analysed or given a function.
* N/A
* Value & beauty of nature.
* yes
* yes
* everything
* yes
* Respect for living things & their total environment
* Math concepts, social relationships, spatial relationships--any number of things
* patience, fairness, good sportmanship

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#27. What do you think the kids can learn while they play?

* yes
* Respect for plants & animals
* cooperation--creativity
* optomism
* most anything
* That they can explore in an interesting environment without too many rules.
* N/A
* Social skills
* N/A
* Peer group association
* N/A
* about outdoors
* how to play
* cooperation
* getting along
* N/A
* Turn-taking, language arts skills, math and science
* everything within reach of their senses
* N/A
* "
* They can learn how to get along with each other.
* Themselves & their surroundings. Physical development.
* anything
* N/A
* " (no answer)
* Take turns & good behaviour.
* yes
* Yes
* Really!! Everything!
* When children play they play--they learn interpersonal relationships & skills
* learn to cooperate
* to respect & love nature
* motivation
* social interaction
* " " (same parent)
* Everything
* N/A
* citizenship, biology concepts, science, math, English, history, motor skills, speech, language
* Everything
* appreciation for outdoors
* How to think
* Learn about nature & planting
* How living things survive
* physical co-ordination, environmental protection, nature studies
* yes
* Relaxation & exercise
* A responsiveness to their surroundings as well as numerous intellectual operations
* N/A
* "
* coordination making friends

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#27. What do yourthink kids can learn while they play?

* cooperation, respect, appreciation
* everything!
* cooperation
* Yes
* depends on what they're playing with--they always learn something
* how to get along
* social skills
* togethernass
* Coordination, self control, social awareness, aesthetics, love of nature.
* yes
* Ecological co-existence

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#28. What do you think kids can learn as well out on the playground as they can in a classroom?

* Yes they can, things that talk about in a classroom, can get better explanation outside the classroom.
* n/a.
* n/a
* environmental studies
* Body will be stronger, their little head more brighter.
* Everything
*
* yes
* leading question--what do you want us to say?
* working with others, plant and pond water studies--
* Yes
* Knowledge of people and a sense of responsibility.
* They learn different things in different settings
* Study, appreciate animals, insects, vegetables, plants--direct, first-hand experience.
* How to get along with each other
* Yes
* n/a
* Good manners, discipline, taking turns, sharing, and consideration for others. Fragility of growing things.
* Social systems, natural systems, motor abilities, respect & interest in the world.
* Picking up trash
* getting along with others (same answer given for #27)
* there is a place for everything
* Yes, with guidance
* interaction w/ one another, physical skills, gardening
* Most anything but particularly, of course, things about people, lifestyles, nature, ecology

31

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#28. What do you think kids can learn as well out on the playground as they can in a classroom?

- motor skills, math games--measuring--etc. Singing/counting games
- the art of human relations.
- not much--two types of situations require different learning, perception& stimulation.
- n/a
- An awareness of life outside of themselves as well as a deeper understanding of their postion in relation to other living things.
- Most of what they need in life
- Everything should have its complement both in and out
- How to communicate with other children. How to express themselves as as they are.
- n/a
- Some things, yes; why not try to integrate them?
- A mixture of answers 26 & 27.
- n/a
- social attitudes--my daughter has a better feeling about herself because of what she learned to do on the bars.
- n/a
- n/a
- see above item 27
- n/a
- to get along together
- yes--and for some even better
- Maybe more
- anything but especially social skills & physical skills & local ecology
- They learn different things
- Nature, certainly. Natural sciences such as basic botany & biology.
- lots of science things for sure, art projects

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#28. What do you think kids can learn as well out on the playground as they can in a classroom?

- natural science, cooperation, sharing, consideration
- yes
- Yes but probably need higher student/teacher ratio.
- biology, bigotry, one upmanship
- Creativity--Look what people can do!
- The basic 3 R's & problem solving in a more imaginative way less removed from the child's actual experience
- Basic botany, natural sciences to a point.
- food chain, nature study, health
- Social skills and, given the controlled use of a facility like WEY, practical applications of natural laws.
- Almost anything, if given enough supervision.
- More than they could in the classroom in terms of socialization of their peers.
- see #25
- n/a
- Everything
- Basic phyics
- Both areas essential
- Responsibility
- Getting along with each other
- abstractions--the playground is for physical, sensual learning--intuitive absorbtion.
- n/a
- getting along with each other
- How to respect each other's space and how to respect nature.
- (same parent)
-
- How to grow physically as well as mentally. Importance of devel-

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#28. What do you think kids can learn as well out on the playground as they can in a classroom?

* How to grow physically as well as mentally. Importance of developing their bodies & understanding relationships between nature, sport fun and bodily development.

* Applied (useful) math, english, science, group processes; How to learn independently by observing, comparing, experimenting, etc.

* n/a

* " (same parent)

* The nature

* yes

* yes

* Soc. interaction--if faculty is solid, their kids learn anything in any condition.

* Natural sciences, biology

* n/a

* social interaction how to understand what people do & why.

* indoors & outdoors are good combinations together.

* almost anything

* " " (same parent)

* Math, science, language arts & social skills

* n/a

* P.E., biology, meterology, astronomy, health, math, physics, musi music, drama, art, dance, survival.

* Nature, sharing, giving also responsibility

* yes, involved in some outdoor projects

* n/a

* n/a

* All kinds of living things.

* n/a

* Depends on what they're learning--It's more work to teabh outside & requires more personell!

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#28. What do you think kids can learn as well out on the playground as they can in a classroom?

* everything

* Nature studies, interpersonal relations some arithmetic, developing their powers of observation.

* n/a

* yes

* n/a

* n/a

* Anything--and sometimes better than indoors.

* Cooperation--the ability to share ideas and learn about the world around them!

* yes

* Sciences, natural history

* Science, biology, nature study--poetry, art, music.

* Practical knowledge, social skills

* togetherness (same answer given in #27)

* see above (referring to answer in #27)

* Seeing how things grow

* A stronger sense of how interpersonal relationships between teacher & student, and student & student, can enhance a well balanced ind.

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#29. What kind of environment do you think is most educational for elementary school children?

* How life goes on. Mainly (Birth)
* n/a
* n/a
* anyone similar to Washington School
* the one just like in your school
* Loving, adventurous, safe, earthy.
* (same parent)
* n/a
* countrylike--an environment that is not totally man-made.
* A stimulating one with a variety of meaningful experiences, with simple clearly defined limits on acceptable behavior.
* n/a
* Relaxed yet firm with goals set for the children--and yet special times for interaction
* A lot of outdoor contact
* the one the children at Washington have!
* n/a
* Varied
* n/a
* Varied
* Open & a planned mix of structure/randomness
* n/a
* An interesting environment which will hold the child's interest.
* healthy
* One that is changing and growing
* Variety of stimuli, space,
* An unpressured but encouraging one; one offering a wide selection of topics;
* n/a

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#29. What kind of environment do you think is the most educational for elementary school children?

* A non-tension producing environment--black top is hostile physically if not emotionally.
* A combination of many forms, organized, free time, directed & self-initiated
* n/a
* A challenging, open environment where teachers relate on an equal basis while still imparting their knowledge.
* This is too broad a question.
* Grass, nooks and crannys, innovative playground structures.
* Natural environment
* n/a
* A structured, happy, up-beat classroom
* There is no specific kind. If you narrow that down you shelter the children from the variety that exsist and that should be at least seen once in a lifetime.
* Saving the environment from pollution.
* A varied one
* n/a
* n/a
* One which is promoted and protected by loving and patient and cheerful adults.
* n/a
* n/a
* warm--friendly--with a spirit and feeling of community
* Varied
* n/a
* n/a
* One that has a diversity of stimulating offerings for them to choose from.
* A warm, caring environment
* a class with a good balance of structured teaching & free activity time.

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#29. What kind of environment do you think is the most educational for elementary school children?

One like the environmental yard where the children have many different areas to explore.

* As varied as possible with bright colors and a lot of natural things around.

* Relatively quiet

* An alive one

* One which presents as much as possible what is to be learned close at hand

* One in which the adults feel they are learning & exploring too.

* Where nature is part of the environment so they may see their place in it.

* A structured, largely traditional classroom situation, supplemented by free, though supervised & enriched play time.

* One that they can have a positive effect on.

* The type that you presently have

* The Washington Yard is better than most; ideally I prefer some wide open green spaces as one sees in suburban schools.

* n/a

* One that nurtures at same time it stimulates--where is OK to be themselves.

* Warm, accepting, cooperative, comfortable, enviorment

* Play activity related to learning experiences.

* n/a

* One in which there is a balance between work and play, basic skills and socializing

* A forest or lake area.

* I feel the environment for learning is different for each child.

* n/a

* A combination of control and freedom.

* (same parent)

*

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#29. What kind of environment do you think is most educational for elementary school children?

* As much open space and naturalness as possible, which youth can take advantage of in coordinated, educational "play."

* Varied, diverse, with surprises, with teachers who can teach how to learn, without violent children.

* n/a

* n/a

* Have a good environment.

* n/a

* n/a

* a thoughtful, loving environment

* A good classroom environment with teachers left alone so they can teach.

* A relaxed environment.

* Freedom to experience reality

* n/a

* Warm, non hostile accepting--pleasant physical surroundings.

* (same parent)

* A stimulating & exciting one such as Washington has.

* n/a

* Open, imaginative, community, flexible, contracting

* Freedom, to learn as well as play.

* learning while doing

* n/a

* Flesh & clean

* The pond

* n/a

* Variety is important & teachers must realise that chaos is not

* mixed indoor & outdoor natural environment

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#29. What kind of environment do you think is the most educational for elementary school children?

* An inside-outside environment like that of Washington School
* n/a
* unhostile
* n/a
* W.E.Y. & more of same
* Loving, encouraging, friendly, stimulating
* Learning about nature
* Washington is an excellent example
* Washington is close--if it were a bit quieter, more organized.
* Combination of urban/rural.
* One with many possibilities for changing activities--not overly structured.
* Sharing, knowing all races
* Natural & artistic
* n/a
* One that enhances creative potential on all levels.

234

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#30. Please use this space to say anything else you want about the Yard, the School Buildings, Environmental Education, or learning and play.

* I'm please with my child's learing at Washington the staff is very put together. I have one complaint. That is, the stairway, I think you should stress more on which side is up & down.
* n/a
* n/a
* n/a
* Should improve better background for the yard variety.
* n/a
* n/a
* As we learned that Washington School is the best school in all aspects. Our child not only learned to read & write tremendiously, but also got acquainted to the nature & animals and started to love & to be with the nature. This is influence of the "Environmental Yard." If possible for those who love to plant, they could plant more what they want in the yard.--I know it is lack of space.
* I am not sure if most of your questions about the Yard have been referring just to the back "dirt?" part or to the whole playground. I have answered about the former.

I am new to the Berkeley schools having one child in kindergarten this year. I am happy to have her at Washington because it is one of the best schools by reputation in this city and by observation has the best playground--primarily because of its size and the especially the environmental yard.

About the environmental yard--I love it. However, it does need to be better maintained, maybe a garden included and if possible some grass started in the more secluded areas so that children could sit somewhere besides in the dirt--there are drainage problems which I have no idea how to solve. I would be willing to put in some time this summer doing gardening help there.

About the yard in general, as a participating parent (occasionally) I have observed the yard in general to be very badly supervised. These observations are of a novice to the school system: the children are kept under very close supervision during the majority of the school day within the classrooms. They are allowed little or no free time within the classroom and this time is far from unstructured--no loud voices, no physical contact with each other of the teacher, no real education in solving interpersonal problems. A lot of sitting still, being quiet etc. At recess the reverse happens--they are locked out (literally) from their enclosed structured space and turned loose onto a huge playground in which they must find a place for themselves. Adults are hard to find. The few times I was on the playground I was sought out by children of all ages many of whom I had never seen before. Sometimes they just wanted to stand or sit near me. I found this strange at first--

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#30. Please use this space to say anything else you want about the Yard, the School Buildings, Environmental Education, or learning and play.

* (con'td)--what is the cause of my popularity here? But now I think I know--many children are very very frightened out there. They don't show it directly--if they do they will be more victimized by bullies. The older aggressive angry children are in charge out there--if not through use of actual physical violence then by hurting the feelings of gentler ones with ugly insults. This situation angers me very much. It seems the teachers' responsibilities should extend to the playground. I know they want to get away from the kids, have their coffee break or whatever, but there must be some way to stop this "law of the jungle" on the playground especially in a k-3 school.
If some kind of structured activities for both boys and girls could be offered, voluntary activities, I think this would help. Any parent volunteers should be encouraged to spend that time on the playground--maybe adults tend to be afraid of that playground situation themselves--there must be some reason why so few adults are out there. --usually in the environmental part of the yard I see no adults at all.
One other thing especially important to me--why are the children lined up by sex (at least on the first floor)? Whose idea is this? In any case if there is some rationale for this, then next year please let the boys line up against the wall and let the girls have the freedom of movement that the boys have experienced all this year.

* I believe that basic reading and math skills are basic and should be the main objective of K--3 since they are even harder to teach later/ The "fun thing" need to be tied to and never replace focus on these basic skills, for people without them have been cheated and disenfranchised. The other skill I feel is very important is writing--putting words together for meaning and communication, not as a special project once in a while but at least once every day, to familiarize children with putting their thoughts in order and getting them on paper.

* n/a

* My daughter enjoyed being able to play after school at Washington and I felt comfortable knowing she was being supervised in case of an emergency. Excellent Program.

* I am very pleased to see the children involved with nature a bit closer than from a book or a once a year field trip.

* Why are there no swings? or sandbox? How about grass play field?

* n/a

* n/a

* n/a

* The yard is great. I doubt kids learn much about saving the environment but the pleasure of a less than total asphalt environment is fine stuff! Remember--if you want answers--leave room. These questions are one step above a Dick & Jane reader. (refers to #27)

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#30. Please use this space to say anything else you want about the Yard, the School Buildings, Environmental Education, or learning and play.

* I hope to further all interconnections especially thru working with poetry in the yard.

* The Yard can be used to round out kids "school experience"--cannot substitute for basic learning skills reading, writing, arithmetic.

* The only thing I feel should be improved is the lunch program they should build or add on a cafeteria or adequate feeding program.

* n/a

* n/a

* My son says there's too much broken glass. Pond needs cleaning up; fresh water.

* Re Questions 16-21: It truly hadn't occurred to me that the Yard would be accessible on week-ends--It's a very appealing idea and my family would welcome the change to use it (especially since we live in an apartment). Being working parents (both working in San Francisco), It's been difficult to arrange time to become good "Washington Parents"--for instance, the WAG meetings always seemed to be on "bads" nights. This was our first year with a child in school so everything about it was an experience--would be helpful to hav. a "New Parents Guide" relating answers to all the countless dumb questions (How much is lunch? How do kids dress? What's acceptible? What can my child bring to share?) Neither of us attended Berkeley Schools and so began the year with no idea of what it was like.
At any rate, we're looking forward to being more active next fall. The concepts at Washington that we've seen have helped to restore our faith in the public school system.

* n/a

* I feel learning is a discipline regardless how its approached and it feel play is the necessary decompressant. Balancing these two is the essence.

* The Yard is great it could however be followed up with some classroom science; perhaps some films on ecology, biology.

* n/a

* n/a

* Would also like to see some structured activities during recess.

*

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#30. Please use this space to say anything else you want about the Yard, the School Buildings, Environmental Education, or learning and play.

* Building of one story like cottages with access to outside and grass instead of concrete surrounding them. The present reflect a practical institutional use of existing structures and are used well but certainly not ideal.

* n/a

* n/a

* My kid & her Washington friends are much more concerned with the playground than the "Yard", if such a difference is permitted. They complain about too many kids on the play structure, too few bars & rings, etc. My own sense of the space is that it doesn't say "Come play here." Neither does the yard. Lots of gross would help. The garden project & work w/ Tom Armor was exciting for them.

* n/a

* The Environmental Education Program has increased my child's interest in the environment. I wish there was some way teachers could suggest how I could get my child to better verbally express herself and to punctually answer questions when asked. If there's any answers phone Joyce 655-0167.

* n/a

* n/a

* n/a

* I sincerely hope other schools in Berkeley will receive the necessary support (money) to create environmental yards--I hope my second child will be able to have the same experience at school that the E.Y. has provided my 1st.

* n/a

* n/a

* n/a

* n/a

* I'm please with the school & the teachers we've been in contact with, but I would like to see a good after school child care program at Washington.

* n/a

* I think the yard is very good in a lot of ways--educational, recreational, & hopefully an example. It would be nice if the building could correspond to it, not such a big emphasis on separate classes, & separate ages. The individual teachers all do different special

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

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* (con'td) projects with emphasis on different things & it would be nice if maybe the kids could choose what project they'd like to work on, irregardless of whether it's their teachers doing it.

* I think the kids need some organized play on the yard, too, at recess time--group games and that sort of thing. Here's where I think parents could really help out--to supervise recess time, plan and play games with the kids, etc.

* n/a

* I have visited many Berkeley elementary schools and Washington is different. People (children & adults) are warm, pleasant & helpful. The playground is not just asphalt and the difference is astonishing.

* n/a

* The cafetorium needs attention, alternative food service (less American junk) might be considered, more study of food chain--less waste. More study directly focused on improving mental health and social attitudes.

* Bless you all who've worked your asses off to do it--everytime I walk by it keeps me going, fighting for changes for a life on earth future.

* More integration of physical aspects & people activities all the time--more class time in Yard & more free to choose what doing within building. Good luck & thanks for what has been so far!

* I think the Yard is an improvement & I know that Marlena & Stacy have a special feeling toward school because of it. I hope that it continues.

* I feel the Yard is a priceless asset to the children's school experience.

* n/a

* n/a

* I just wish the School Building and Yard were twice as big as they presently are.

* n/a

* n/a

* n/a

* Better lunches, fire the administrators, & recall the School Board!

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#30. Please use this space to say anything else you want about the Yard, the School Buildings, Environmental Education, or learning and play.

* Children should be given an input factor relating to the direction in which the "Yard" should grow.

* n/a

* I am most interested and most concerned in furthering programs where children of different groups can learn to get along and learn about each other's cultures.

* I would like to see WEY continue to grow & be cared for. It could easily be expanded into more of the asphalt area--the garden & animal area needs a real home--they are presently cramped & ugly. WEY should be beautiful! (BEAUTIFUL!)

* n/a

* I really dug hearing East Bay Boogaloo at the yard sale. (festival) I also think the visual aspect of Washington Yard is imaginative in contrast to the usual poison-yard effect you see at most schools.

* There aren't many places for our children to run free. And we had no place for a garden. We're grateful for the Washington Environmental Yard.

* (same parent)

* " "

* Since in the city we can only seldomebring the kids to the mountains, let us as much as possible bring the mountains to the kids.

* (1) Environmental education can be used as a core subject for learning processes: English, math, scientific inquiry, group processes (cooperation, allocating responsibility, etc.) (2) Env. ed. subject matter is also important for its own sake because of the concepts: Adaptation, energy and nutrient cycles, interdependence, fragility of ecosystems--all 21st century survival requirements. (3) Learning is most fun and most permanent when it is play: self-motivated, self-directed, with its own special place and time and special rules, and without anything heavy hanging over your head in case you blow it. It doesn't have to be competitive. It can be cooperative. (4) Not all children can handle that kind of freedom. Those who can handle it should have it. Those who can't handle it might be able to learn how to handle it (how to learn) in the yard, where a certain amount of motivation is built in. Those who can't learn how to handle it can go to a school with buildings and paved dirt and the rest of the normal routine (or take part in a different experiment). (5) AFTERTHOUGHT to no. 3 ABOVE: Play is the means for children to learn the basic skills they will need in adulthood. Hunter-gatherer children play with bows and arrows. Urban children play with a lot of dangerous machinery. But in the yard urban children can play-learn with the ecological aspect of reality, which is more important than the steel and concrete aspect (people can live without __steel & concrete___an ecosystem--check one!)

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#30. Please use this space to say anything else you want about the Yard, the School Buildings, Environmental Education, or learning and play.

* n/a

* n/a

* n/a

* n/a

* n/a

* See Zena Henderson stories "The People" she really writes about how & percieve school--faculty--students relationships should be and are at Washington.

* 1) The yard is totally unnecessary with one of the biggest regional park systems in the country at our back door--O.K. for an inner city school where there are no parks.
2) ie picking up "litter"--"litter count"--I would rather see children learn to pick up litter on the sidewalks of the city, etc.
3) I wonder how many of the volunteers on the project come from homes where grass, etc. is not cared for? I would like to see people have more self-respect for their own private environment before taking time to make another environment.
4) I feel too much emphasis has been put on the yard with resulting dissatisfaction among teachers, parents, etc. There has been no impact on my children except with respect to getting their shoes wet and watching others children "fool" around the pond.
5) Often drive by on weekends--not used at all--as far as I have observed. Federal funds could have been used to put more aides in the classroom.
Thanks for the opportunity to say my piece. ~~I.~~ Leonardos
P.S. Husband concurs 100%

* Generally pleased with the Yard. And would emphasize Environmental Education.

* n/a

* n/a

* n/a

* n/a

* n/a

* n/a

* nice concept. Adds extra dimension to school program. I'd like to see the Yard used educationally more. Biology concepts, math, language development. Class projects should be encouraged. Expand the Yard. Use OBIS (?).

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#30. Please use this space to say anything else you want about the Yard, the School Buildings, Environmental Education, or learning and play.

- n/a
- n/a
- n/a
- n/a
- n/a
- n/a
- Creativity and structure is not a nasty word. It is no favor to children to bring them up to be obnoxious rude brats--rather it is an insensitivity which carries over to other areas, esthetic & social. Freedom to run & play in the Yard at some times and at others to closely observe the natural changes is important.
- I think a good experience for the children was to see the yard develop and help with its construction, an ongoing project that integrated the sudents with its work.
- n/a
- n/a
- n/a
- n/a
- It's great, incomparably better than anything I've seen except a county school with a real nature area for a yard--please keep it up and do more.
- n/a
- The landscape condition of the Environmental Yard needs to be improved. The playground area should be made safe for play activities.
- Washington School is an excellent model for K-3 schools. All elementary schools (K-3 levels especially) should be changed to similar scene as Washington.
- the building & most classrooms feel quite warm. the yard is marvellous, and seems to offer something for every type of child. My only complaint is the size (no. of students) and noise level, which can distract from learning.
- I like the Yard and so does my son--I hope you will continue to improve upon it.
- All in all, the physical plant at Washington is very appealing

WASHINGTON SCHOOL PARENT QUESTIONNAIRE

#30. Please use this space to say anything else you want about the Yard, the School Buildings, Environmental Education, or learning and play.

- Washington is a great school!
- I think vines could be grown on the fences, some narrow concrete or stone paths could be made throughout the "natural" yard to prevent mud. Murals could be planned by knowledgeable adults with children's drawings or other drawings, etc. If money was no object, it would be nice to have several yard teachers at recess making sure some children are not harassing other children.
- n/a
- n/a

APPENDIX Q

PEET Staff Questionnaire

From: Don
To: PEET Staff
Re: Final evaluation of PEET Project Questionaire

Please answer as many of the following questions as you feel you can, to the best of your ability, not wasting too many words. The answers will be compiled and re-distributed for your own use, and for the final report to HEW. Thanks. Don

Name: _____ Job Title: _____ Hours per week at job: _____

3. State succinctly but fully the kind of work you did, and the percent of your hours on the project you spent at each task.

4. Did your work overlap that of another person? Yes No
Was that advantageous or dis-advantageous? _____
Explain: _____

5. Do you feel your work tied into the mainstream of the PEET project, or was it peripheral or even incidental to it? _____

6. What kinds of things would you have liked to do that you were not able to do? _____

7. Were you able to meet your personal goals in participating in the PEET project? Yes No Some To the extent that you were, what about the project helped you? _____

To the extent that you were not, what hindered you? _____

8. Do you feel you understand what everyone else on the project was doing? _____

9. Do you feel that what everyone else was doing was of relevence to the project as a whole? _____

10. Do you know of any job that needed to be done that was never done? explain: _____

11. State your understanding of the goals of the PEET project: _____

12. Were these goals compatable or incompatable with your own goals? explain: _____

13. State your understanding of the methods the project used to meet each of the project's goals, as you listed them in #11. _____

14. Were there events that occured that seemed completely irrelevent to project goals? Explain: _____

15. If the project could be done over again, what would you personally do differently? _____

16. What would you have the PEET project do differently? _____

17. Make a statement about your E.E. values as they were a year ago and contrast them to how they are now. _____

18. What was the greatest impetus of development or change in those values? _____

19. What is your overall feeling about the success of the PEET project this year? Explain: _____

20. What external factors did you find constrained or facilitated your participation in the PEET project? _____

Please put your responses in the PEET box, on Don's desk, or give to Don. If some questions seem irrelevent to you, make up your own question and answer it for yourself. Thanks.

240

APPENDIX R

Methods for Observation of Children

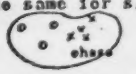
1. Tracking

2. Time-lapse observations

3. Sample Behavioral Map

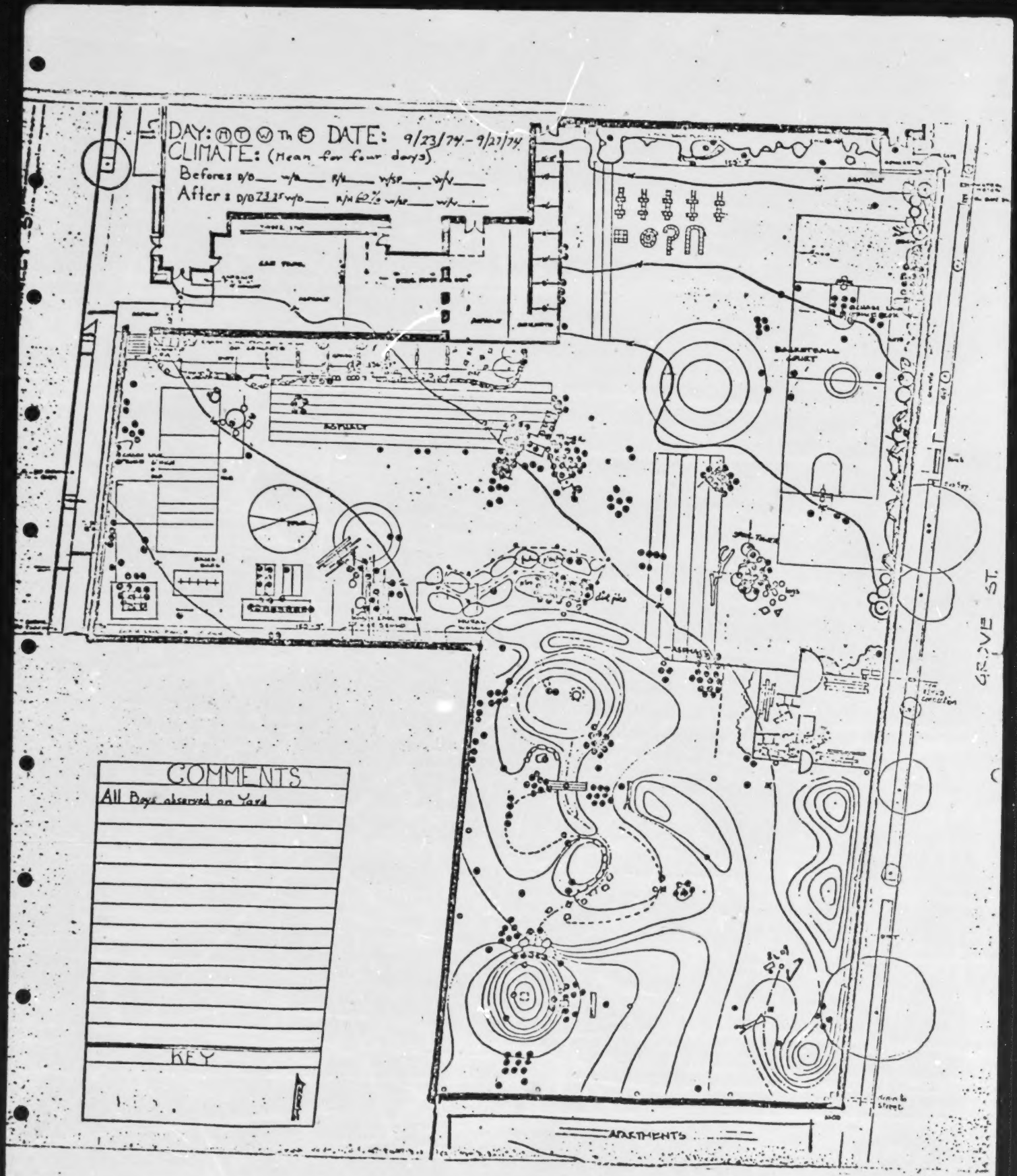
1. Time-Lapse Observation:

   a) Prepare a reproducible plan of the observation site, with all elements included, i.e. hills, inclines, lines painted on asphalt, play objects, vegetation, buildings, etc.
   b) Divide the site into a minimum number of easily observable areas (for me that means an area with 20-30 children).
   c) Having randomly selected the order, go to each site at some periodic interval (i.e. five minutes) and mark on the plan the location of each child, using a different symbol for each category (i.e. boy-girl-teacher, etc.). Also mark the time of observation.
   d) Write in the remaining time any unusual activity (i.e. assume a child marked at a swing is swinging, if not write what he/she is doing, i.e. teasing, playing tag, etc.)
   e) Children who are not in association with some element are the hardest to deal with. Those passing through the area on their way elsewhere, I preceded with an arrow (x⟶). Those playing tag I circled and wrote "tag." I did the same for simple chasing activity, i.e.:



2. Tracking Observation:

   a) From a single vantage point (i.e. school roof), select one or two children from each area in the site ("b" above) and using different colors, follow them for the entire recess period.
   b) On the plan write the time every minute or so to tell the sequence of movement and amount of time spent at each place.
   c) After a few weeks, adjust number of children observed at one session so as to not lose any and to get the grain of detail necessary. I ended up observing one child at a time from the ground for the full recess. But I did this only with children in whom I was particularly interested.
   d) It is difficult to track and write notes at the same time. However, a single word written by the line can help one recall events after the observation, when a more complete report should be written of the observation. A number by the line with a note at that number works well if the child(ren) is/are moving slowly.
   e) Different kinds of lines can be used for running, walking purposefully, walking aimlessly, and perhaps walking alone or walking together (I have been able to do the first three or the the last two, but not all at once).
   f) Postscript: Both methods are best when interspersed with observation periods spent just standing around listening and noting whatever is happening or comes to mind. These observations provide useful anecdotes and allow for the pursuit of specific interests.1


DAY: M T W Th F DATE: 9/23/74 - 9/27/74
CLIMATE: (Mean for four days)
Before: o/o ___ w/a ___ p/c ___ w/sp ___ o/v ___
After: o/o 23.5° w/o ___ p/c 62% w/sp ___ w/v ___
BASKETBALL COURT
ASPHALT
GROVE ST.
APARTMENTS
COMMENTS
All Boys observed on Yard
KEY